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GOVERNOR



MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## State Water Resources Control Board

Division of Drinking Water

March 8, 2017

System No.: 2400066

Mr. Jose L. Gonzalez, Superintendent  
Planada Elementary School  
P.O. Box 236  
Planada, CA 95365

### **RE: CITATION NO. 03-11-17C-009, Source Flow Meter**

Enclosed is a Citation issued to the Planada Elementary School (hereinafter "Water System") public water system.

The Water System will be billed at the State Water Resources Control Board's (hereinafter "State Board") hourly rate (currently estimated at \$161.00) for the time spent on issuing this Citation. California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred by the State Board for specified enforcement actions, including but not limited to, preparing, issuing and monitoring compliance with a citation. At this time, the State Board has spent approximately 2.0 hour(s) on enforcement activities associated with this violation.

The Water System will receive a bill sent from the State Board in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the District for the current fiscal year.

If you have any questions regarding this matter, please contact Austin Ferreria at 559-447-3300 or me at 559-447-3316.

Sincerely,

Kassy D. Chauhan, P.E.  
Senior Sanitary Engineer, Merced District  
Central California Section  
SOUTHERN CALIFORNIA BRANCH  
DRINKING WATER FIELD OPERATIONS

Enclosures

Certified Mail No.: 7016 1370 0000 0455 3291

cc: Mr. Jared Steeley, Contract Operator  
Merced County Environmental Health Department

**STATE OF CALIFORNIA  
WATER RESOURCES CONTROL BOARD  
DIVISION OF DRINKING WATER**

**IN RE: PLANADA ELEMENTARY SCHOOL  
WATER SYSTEM NO. 2400066**

**TO:** Mr. Jose L. Gonzalez, Superintendent  
P.O. Box 236  
Planada, CA 95365

**CC:** Mr. Jared Steele, Contract Operator  
Merced County Environmental Health Department

**CITATION FOR VIOLATION OF  
CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64561  
Source Flow Meters**

**Issued on March 8, 2017**

Section 116650 of the California Health and Safety Code authorizes the issuance of a citation to a public water system for violation of the California Safe Drinking Water Act (Health and Safety Code, Division 104, Part 12, Chapter 4, commencing with Section 116270) (hereinafter "California SDWA"), or any regulation, standard, permit or order issued or adopted thereunder.

The State Water Resources Control Board (hereinafter "Board"), acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division (hereinafter "Deputy Director"), hereby issues a citation to the Planada Elementary School Water System (hereinafter "Water System") (161 Plainsburg Road, Planada, CA 95365) for violation of California Code of Regulations (CCR), Title 22, Section 64561.

1 **APPLICABLE AUTHORITIES**

2 The applicable statutes and regulations are provided in Appendix A, attached hereto and  
3 incorporated by reference.  
4

5 **STATEMENT OF FACTS**

6 The Water System is a nontransient-noncommunity water system serving a population of  
7 approximately 605 people per day through a single service connection. Effective April 1, 2014,  
8 the Merced County Department of Environmental Health transferred the jurisdictional regulatory  
9 oversight for this water system to the Division. The Water System currently operates under a  
10 water supply permit (No. 03-11-15P-089) issued by the Division on December 14, 2015  
11 (Appendix B).  
12

13 The Division conducted a sanitary survey of the Water System on October 13, 2015, and  
14 observed that a flow meter was not installed on the discharge piping from Well No. 1. The  
15 Division noted the need to install a totalizing flow meter at a point between the source and the  
16 entry point to the distribution system and submit photo documentation to the Division by January  
17 31, 2016. In addition, the System was required to begin recording monthly well production  
18 quantities on at least a monthly basis and reporting those quantities to the Division annually via  
19 the electronic Annual Report to the Drinking Water Program (e-ARDWP). Despite the Division's  
20 efforts to inform the Water System of the requirements to install a flow meter and record the total  
21 monthly water production, the Water System has failed to install the flow meter and begin  
22 reporting the monthly production from Well No. 1 annually to the Division.  
23

24 **DETERMINATION**

25 Title 22, CCR, Section 64561, Source Flow Meters provides that each water system shall install  
26 a flow meter at a location between each water source and the entry point to the distribution  
27



1 system and meter the quantity of water flow from each source, and record the total monthly  
2 production each month.

3  
4 The Division has determined that the Water System failed to comply with Title 22, CCR, Section  
5 64561, Source Flow Meters by failing to install a flow meter at Well No. 1 and for failure to meter  
6 the quantity of water flow from each source and record the total monthly production each month.

### 7 8 9 **ADMINISTRATIVE PENALTIES**

#### 10 11 **Pursuant to CHSC Section 116650**

12 Sections 116650(a) of the CHSC allows for the issuance of a citation for failure to comply with  
13 the requirements of the California Safe Drinking Water Act, or any regulation, permit, standard,  
14 citation, or order issued thereunder. Section 116650(d) and (e) allow for the assessment of a  
15 penalty not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurs.  
16

17 Despite the Division's efforts to work with the Water System, the Water System has failed to  
18 comply with Section 64561. Therefore, the Division hereby assesses an administrative penalty  
19 of one thousand and five hundred dollars (\$1,500) upon Water System. Directive No. 5 below  
20 describes the requirements for payment of the Penalty and conditions under which the Division  
21 may waive the requirement to pay the penalty.  
22

### 23 **DIRECTIVES**

24 The Water System is hereby directed to take the following actions:  
25

- 26 1. On or before March 31, 2017, submit a written response to the Division indicating its  
27 willingness to comply with the directives of this citation.



2. On or before May 31, 2017, install a source flow meter on Well No. 1 at a point between the source and the entry point to the distribution system per Section 64561.
  3. On or before May 31, 2017, submit photo documentation to the Division showing the installation of the flow meter on Well No. 1 at a point between the source and the entry point to the distribution system in accordance with Section 64561.
  4. Beginning in June 2017 or before, record the total production from each active source a minimum of monthly and report the total monthly production to the Division annually via the Electronic Annual Report.
  5. Pay the Penalty of one thousand and five hundred dollars (\$1,500) within 90 days of the receipt of this Citation. Payment shall be made payable to the State Water Resources Control Board – Division of Drinking Water. Further instruction on the payment is provided in Appendix C, Notice of Citation Issuance.
- If the Water System complies with Directives 1, 2, 3, and 4 before the Penalty becomes due, and upon written request from the Water System, the Division will *consider, at its sole discretion*, terminating the requirement to pay the penalty.
6. If the Water System is unable to perform the tasks specified in this citation for any reason, whether within or beyond its control, and if the Water System notifies the Division in writing no less than five days in advance of the due date, the Division may extend the time for performance if the Water System demonstrates that it has used its best efforts to comply with the schedule and other requirements of this citation.

1 The Division reserves the right to make such modifications to the Citation as it may deem  
2 necessary to protect public health and safety. Such modifications may be issued as  
3 amendments to this Citation and shall be effective upon issuance.

4  
5 Nothing in this Citation relieves the Water System of its obligation to meet the requirements of  
6 the California Safe Drinking Water Act or any regulation, standard, permit or order issued  
7 thereunder.

8  
9 All submittal required by this Citation shall be submitted to the Division at the following address:

10  
11 Kassy D. Chauhan, P.E.  
12 Senior Sanitary Engineer  
13 State Water Resources Control Board  
14 Division of Drinking Water  
15 265 W. Bullard Avenue, Suite 101  
16 Fresno, CA 93704

17  
**PARTIES BOUND**

18 This Citation shall apply to and be binding upon the Planada Elementary School Water System,  
19 its officers, directors, agents, employees, contractors, successors, and assignees.

**SEVERABILITY**


20 The Directives of this Citation are severable, and the Water System shall comply with each and  
21 every provision thereof notwithstanding the effectiveness of any provision.

**FURTHER ENFORCEMENT ACTION**

22 The California SDWA authorizes the Board to: issue citation with assessment of administrative  
23 penalties to a public water system for violation or continued violation of the requirements of the  
24 California SDWA or any permit, regulation or order issued or adopted thereunder including, but  
25 not limited to, failure to correct a violation identified in a citation or compliance order. The  
26 California SDWA also authorizes the Board to take action to suspend or revoke a permit that has  
27

1 been issued to a public water system if the system has violated applicable law or regulations or  
2 has failed to comply with an order of the Board; and to petition the superior court to take various  
3 enforcement measures against a public water system that has failed to comply with an order of  
4 the Board. The Board does not waive any further enforcement action by issuance of this citation.

5  
6 3-8-2017  
7 Date

  
8 Carl L. Carlucci, P.E.  
9 Supervising Senior Sanitary Engineer,  
Central California Region  
DRINKING WATER FIELD OPERATIONS BRANCH

10 **CERTIFIED NO.: 7016 1370 0000 0455 3291**

11  
12 **CLC/KDC/Citation/no flow meter**

13 **Appendices:**

14 Appendix A: Applicable Authorities  
15 Appendix B: Water Supply Permit No. 03-11-15P-089  
16 Appendix C: Notice of Citation Issuance





## **APPENDIX A**

### **Applicable Statutes and Regulations for Citation No. 03-12-17C-XXX**

#### **Section 116650 of the CHSC states in relevant part:**

##### **§116650. Citations**

- (a) If the Division determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Division may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The Division may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

#### **Section 64561 of Title 22, California Code of Regulations states in relevant part:**

##### **§64561. Source Flow Meters.**

Each water system shall:

- (a) Except for inactive sources, install a flow meter at a location between each water source and the entry point to the distribution system;
- (b) Meter the quantity of water flow from each source, and record the total monthly production each month.

**State Water Resources Control Board**  
Division of Drinking Water

December 14, 2015

System No.: 2400066

Mr. Jose L. Gonzalez,  
Superintendent  
Planada Elementary School District  
P.O. Box 236  
Planada, CA 95365

Dear Mr. Gonzalez:

**RE: Water Supply Permit No. 03-11-15P-089**

The purpose of this letter is to inform you that the State Water Resources Control Board Division of Drinking Water (Division) has issued a domestic water supply permit for the Planada Elementary School (School) water system. The Domestic Water Supply Permit, Water Quality Monitoring Schedule, and an Engineering Report are attached to this letter. Please review the technical report and provide any comments or corrections to the Division in writing.

In addition to the permit provisions included in the permit, the Division recommends that the School address the following items:

1. The School must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
2. The School must install a flow meter equipped with a totalizer on Well No. 1 as required in the California Waterworks Standards. The School must submit receipts and/or photos as proof of flow meter installation by January 31, 2016. Beginning in February 2016, the School must record the total production from the well a minimum of one time per month and report the monthly production totals to the Division monthly by the 10<sup>th</sup> day of the following month.
3. At the time of the inspection, the building that the well and the pressure tanks are enclosed in had a lot of debris on the ground and had not been cleaned. The School should ensure that the building that houses the well and the pressure tanks is cleaned periodically and kept free of debris.

4. With the School having a single source of water supply, the Division requires that the School evaluate source capacity and develop drought contingency plan to deal with possible water shortages and/or outages. Contact the Division for information on available funding programs such as State Revolving Fund and SB 103 grants the School can apply to secure potential funding to mitigate lack of source capacity. Please provide a written response to our office by January 31, 2016, which outlines the School's plan of action to deal with possible water shortages and/or outages including the implementation of water conservation measures. Given the close proximity of the School's system to the public water system for the Planada Community Services District, the School should evaluate consolidating with the Planada Community Services District or at the least establishing an emergency connection with the Planada Community Services District. Grant funds from the Drinking Water State Revolving Fund are available to the School for such a consolidation project.
5. An Emergency Chlorination Plan must be developed and submitted for the water system by January 31, 2016. It is recommended that the well be plumbed and wired for emergency chlorination equipment installation. Details of what is to be included in the plan can be found in the guidance document attached (Attachment C) to this report. The School must use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by January 31, 2016.
6. At the time of the inspection, the air relief valves on the two 525-gallon steel pressure tanks were leaking and need to be replaced or repaired. In addition, the vents on the air relief valves need to be inverted, screened and terminate at least 36-inches above finished grade.
7. By January 31, 2016, an updated ENP must be submitted to the Division with current School District staff and on the Division's form. A template for the ENP can be found in Attachment E.
8. The State's Water Quality Inquiry database did not contain any results for general physical characteristics. The School must ensure that general physical characteristics are monitored for when the next round of monitoring is completed in May 2016.
9. The School must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The School must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years. A copy of the cross-connection control survey must be submitted to the Division by January 31, 2016. The guidelines on cross connection survey are enclosed as Attachment D.
10. The School is required to submit a Consumer Confidence Report (CCR) to each customer in their service area by July 1st of each year. A copy of the CCR and the certification letter must be submitted to the Division by October 1st of each year.
11. A Bacteriological Sample Siting Plan (BSSP) was created during the inspection. If the BSSP that was created is acceptable, the School must sign and date the BSSP and return the signed BSSP to the Division by January 31, 2016. The School should ensure



that the contract operator and the analytical laboratory have a copy of the BSSP that was created. All distribution system bacteriological monitoring must be conducted in accordance with the approved BSSP.

**Please acknowledge in writing by January 15, 2016**, receipt of this water supply permit, your willingness to comply with the permit provisions and any comments or corrections to the engineering report. This permit contains an all-inclusive list of applicable special permit provisions.

Sincerely,

A handwritten signature in dark ink, reading "Kassy D. Chauhan". The signature is fluid and cursive, with the first letters of each word being capitalized and prominent.

Kassy D. Chauhan, P.E.  
Senior Sanitary Engineer  
Merced District  
Central California Section  
SOUTHERN CALIFORNIA BRANCH  
DRINKING WATER FIELD OPERATIONS

Enclosures

Cc: Merced County Environmental Health Division  
Mr. Jared Steely – Contract Operator

KDC/ 2400066/2015 WSP transmittal letter – Dec 14 2015.doc

State Water Resources Control Board  
Division of Drinking Water

*Certificate of Issuance*  
OF A  
**WATER SUPPLY PERMIT**  
TO

Planada Elementary School Water System

This is to certify that a water supply permit **03-11-15P-089** has been issued to Planada Elementary School Water System on **December 14, 2015**, to supply water for domestic purposes to the Planada Elementary School Water System. The permit was issued by the State Water Resources Control Board - Division of Drinking Water, pursuant to the provisions of Division 104, Part 12, Chapter 4, Article 7, of the California Health and Safety Code. The permit is subject to the requirements of Title 22, California Code of Regulations, and to the conditions provided in the water supply permit.

A copy of the water supply permit is on file with the Planada Elementary School Water System or may be obtained by contacting the Merced District Office of the State Water Resources Control Board - Division of Drinking Water, Field Operations Branch, 265 W. Bullard Ave., Ste. 101, Fresno, CA 93704



*Kassy D. Chauhan*

Kassy D. Chauhan, P.E., Senior Sanitary Engineer

**State Water Resources Control Board**  
Division of Drinking Water

**STATE OF CALIFORNIA**

**DOMESTIC WATER SUPPLY PERMIT ISSUED TO  
Planada Elementary School Water System  
Water System No. 2400066**

PERMIT NO. 03-11-15P-089

EFFECTIVE DATE: *December 14, 2015*

**WHEREAS:**

1. The Planada Elementary School Water System was operated under a Domestic Water Supply Permit issued by the local primary agency of Merced County. The change in regulatory jurisdiction beginning April 1, 2014, required a revised domestic water supply permit be issued to Planada Elementary School.
2. The public water system is known as the Planada Elementary School whose headquarters is located at 161 Plainsburg Road, Planada, CA 95365. The physical location of the Planada Elementary School is located at 9525 E. Brodrick Avenue, Planada, CA 95365.
3. The public water system for which the permit application has been submitted is described briefly below:

The School's Water System is a nontransient-noncommunity water system located in Planada in Merced County. The water system serves a K-through 5th grade school with a population of approximately 605 students and staffs. The system consists of one well, two 525-gallon steel pressure tanks, and the associated distribution system.

**And WHEREAS:**

1. The Planada Elementary School has submitted all of the required information relating to the operation of the Planada Elementary School Water System.
2. The State Water Resources Control Board, Division of Drinking Water has evaluated all of the information submitted by the Planada Elementary School and has conducted a physical investigation of the Planada Elementary School Water System on October 13, 2015.
3. The State Water Resources Control Board, Division of Drinking Water has the authority to issue domestic water supply permits pursuant to Health and Safety Code Section 116540.



**THEREFORE:**

1. The Planada Elementary School Water System meets the criteria for and is hereby classified as a nontransient-noncommunity water system.
2. The applicant has demonstrated that the Planada Elementary School has adequate technical, managerial, and financial capacity to operate the water system.
3. Provided the following conditions are complied with, the Planada Elementary School Water System should be capable of providing water to consumers that is pure, wholesome, and potable and in compliance with statutory and regulatory drinking water requirements at all times.

*THE PLANADA ELEMENTARY SCHOOL DISTRICT IS HEREBY ISSUED THIS DOMESTIC WATER SUPPLY PERMIT TO OPERATE THE PLANADA ELEMENTARY SCHOOL WATER SYSTEM.*

The Planada Elementary School Water System shall comply with the following permit conditions:

1. The permitted active source for the Planada Elementary School is Well No. 1 (PS Code 2400066-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.
2. The Planada Elementary School must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
3. The Planada Elementary School shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
4. The Planada Elementary School shall submit an Annual Report to the Drinking Water Program (ARDWP) each year, documenting specific water system information for the prior year. The report shall be in a format specified by the Division.
5. The Planada Elementary School distribution system is classified as a D1 distribution system. As such, the School must have a chief operator that is certified as a D1 distribution system operator, or higher.
6. The Planada Elementary School must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The School must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years. A copy of the cross-connection control survey must be submitted to the Division by January 31, 2016. The guidelines on cross connection survey are enclosed as Attachment D.

This permit supersedes all previous domestic water supply permits issued for this public water system and shall remain in effect unless and until it is amended, revised, reissued, or declared to be null and void by the State Water Resources Control Board, Division of Drinking Water. This permit is non-transferable. Should the Planada Elementary School water system undergo a change of ownership, the new owner must apply for and receive a new domestic water supply permit.

Any change in the source of water for the water system, any modification of the method of treatment as described in the Permit Report, or any addition of distribution system storage reservoirs shall not be made unless an application for such change is submitted to the State Water Resources Control Board, Division of Drinking Water.

This permit shall be effective as of the date shown below.

FOR THE STATE WATER RESOURCES CONTROL BOARD, DIVISION OF DRINKING  
WATER

12-14-15

Kassy D. Chauhan

Kassy D. Chauhan, P.E.  
Senior Sanitary Engineer  
Merced District  
Central California Section  
SOUTHERN CALIFORNIA BRANCH  
DRINKING WATER FIELD OPERATIONS

KDC/2400066/water supply permit.doc

**Engineering Report  
For the Consideration of a Domestic Water Supply Permit for the  
Planada Elementary School  
System No. 2400066  
Merced County  
December 2015**

**State Water Resources Control Board  
Division of Drinking Water  
Drinking Water Field Operations - Merced District  
Kassy Chauhan, P.E. – Senior Sanitary Engineer**

**I. INTRODUCTION**

**1.1 PURPOSE OF REPORT**

The Planada Elementary School Water System (School) is under the primacy of the State Water Resources Control Board, Division of Drinking Water (Division). The purpose of this report is to describe the current state of the water system and to make recommendations regarding the issuance of a domestic water supply permit from the Division. This report will cover the change in regulatory jurisdiction from Merced County to the Division and document all aspects of the water system as witnessed during the sanitary survey inspection and all water system files.

**1.2 DESCRIPTION OF THE SYSTEM**

The School is classified as a nontransient-noncommunity water system. The water system consists of a single well (Well No. 1), two 525-gallon steel pressure tanks and the distribution system. The School serves a population of approximately 605 through a single service connection. The School is owned by the Planada Elementary School District. The School District's Superintendent is Mr. Jose Gonzalez. The School's M.O.T. Supervisor, Elias Lozano, accompanied Division staff for the inspection.

The School is connected to the Planada Community Services District's community sewer system. All sanitary sewer lines are located more than 150 feet from the wellhead.

**1.3 SOURCES OF INFORMATION**

Information for the preparation of this report was obtained from Mr. Elias Lozano; the Merced County Environmental Health Department files; system files from the Merced District Office of the Division of Drinking Water; and a field inspection conducted on October 13, 2015, by Kassy Chauhan.

**II. INVESTIGATION FINDINGS**

**2.1 AREA SERVED**

The School is located at 9525 E. Brodrick Avenue in Planada in Merced County. The School's distribution system consists of a single pressure zone. Well No. 1 is located on the southeast part of the School campus. The School serves students from kindergarten through fifth grade and is open August through June of each year.



## **2.2 SOURCE OF SUPPLY**

### **Well No. 1 – Southeast of School Grounds (Active Untreated)**

Well No. 1 was drilled to an unknown depth. A Well Completion Report is not on file for the well so the construction information on the well is limited. Well No. 1 was constructed with a 12-inch diameter steel casing to an unknown depth. The length and depth of the screened interval is unknown. The well is assumed to be constructed with an annular seal but it is unknown to what depth. The wellhead is enclosed in a concrete block building with a concrete floor. The casing extends about 6 inches above the concrete floor. The well is equipped with a submersible pump but the size of the pump is unknown. As mentioned, the Department of Water Resources (DWR) Well Completion Report is not on file for this well. If the School has a copy of the DWR Well Completion Report on file, a copy should be submitted to the Division. This will help the Division understand the well construction to ensure that all components are adequate for sanitary purposes.

The well discharge piping includes a check valve and then discharges directly to the two 525-gallon steel pressure tanks. At the time of inspection, it was noted that a flow meter is not installed on the well discharge line. The discharge piping from the steel pressure tanks includes a 3-inch diameter discharge line that provides water to the School distribution system and the irrigation system. In addition, there is a 1-inch diameter discharge line that provides water to the snack bar/restrooms that are located near the well. At the time of the inspection, the static water level was reported to be 96 feet and the pumping water level was reported to be 109 feet.

The School must install a flow meter equipped with a totalizer on Well No. 1 as required in the California Waterworks Standards. The School must submit receipts and/or photos as proof of flow meter installation by January 31, 2016. Beginning in February 2016, the School must record the total production from the well a minimum of one time per month and report the monthly production totals to the Division each month by the 10<sup>th</sup> day of the following month.

At the time of the inspection, the building that the well and the pressure tanks are enclosed in had a lot of debris on the ground and had not been cleaned. The School should ensure that the building that houses the well and the pressure tanks is cleaned periodically and kept free of debris.

## **2.3 ADEQUACY OF SUPPLY**

The estimated capacity of Well No. 1 is unknown. Since no flow meter is provided at Well No. 1, actual water usage information is not available.

Section 64554(a) of Title 22 states that at all times a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). Currently, the School does not meet this requirement with Well No. 1 being the sole source for the system. A water outage would result in water hauled or closure of the school. A water main connection to a large utility is not an option for this water system.

With the School having a single source of water supply, the Division requires that the School evaluate source capacity and develop drought contingency plan to deal with possible water

shortages and/or outages. Contact the Division for information on available funding programs such as State Revolving Fund and SB 103 grants the School can apply to secure potential funding to mitigate lack of source capacity. Please provide a written response to our office by January 31, 2016, which outlines the School's plan of action to deal with possible water shortages and/or outages including the implementation of water conservation measures. Given the close proximity of the Planada Community Services District to the School, the School should consider consolidating with the Planada Community Services District or establishing an emergency connection with the Planada Community Services District. The School is eligible for 100 percent grant funds from the Drinking Water State Revolving Fund.

After the installation of the flow meter, the School must begin tracking water production of Well No. 1 on at least a monthly frequency and submit total production report on a monthly basis to the Division by the 10<sup>th</sup> day of the following month.

### **Water Conservation**

California is facing water shortfalls in the driest year in recorded state history. On January 17, 2014, Governor Brown proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for these drought conditions. Due to these conditions, all public water systems should regularly measure and record the static and pumping water levels in their groundwater wells, ideally on a monthly basis, watching for changes in water level. Additionally, all public water systems are encouraged to evaluate water losses in their delivery systems.

On May 5, 2015, California adopted drought Emergency Regulations which require non-urban water suppliers (serving fewer than 3,000 connections) to achieve a 25% conservation standard or restrict outdoor irrigation to no more than 2 days per week.

During the summer months students are not on campus and the amount of staff is reduced significantly. The School's production the months of June and July are greater than most months when students are present. This is assumed to be due to irrigation. Using larger volumes of water than normal to keep soccer fields green during the summer months is not a sound conservation measure. The School could be closer to achieving the required reduction in use if the volume of water used to irrigate during the summer is reduced.

The School should develop a Drought Contingency Plan in order to be prepared for challenges that may arise as a result of the drought. Attachment B is a drought contingency plan and an emergency response plan checklist. The School needs to complete the drought preparedness and emergency response checklists and return them to the Division by January 31, 2016.

## **2.4 TREATMENT**

No treatment is provided at this time. A review of the water system's file showed that there was no Emergency Chlorination Plan on file. An Emergency Chlorination Plan must be developed and submitted for the water system by January 31, 2016. It is recommended that the well be plumbed and wired for emergency chlorination equipment installation. Details of what is to be included in the plan can be found in the guidance document attached

(Attachment C) to this report. The School must use the attached guide to create an Emergency Chlorination Plan and submit it to the Division by January 31, 2016.

## **2.5 STORAGE AND DISTRIBUTION SYSTEM**

No storage is provided for domestic use. Next to the Well No. 1, the School has a two 525-gallon galvanized steel pressure tanks that provide distribution system pressure. Each pressure tank is equipped with air relief valves and pressure gauges. At the time of the inspection, the air relief valves were leaking and need to be replaced or repaired. In addition, the vents on the air relief valves need to be inverted, screened and terminate at least 36-inches above finished grade. At the time of inspection, pressure was being maintained between 40-60 psi.

The system file did not contain information on the type of distribution system pipes for the School. It is thought that the distribution system consists of PVC and steel distribution system lines. There are no dead-ends in the distribution system. Routine flushing of the distribution system is not practiced given the small size of the distribution system. Line breaks are repaired under pressure by a licensed contractor under the direction of the contract operator.

## **2.6 OPERATION AND MAINTENANCE**

The School's water system is managed by the School's Board of Directors. The primary person responsible for the water system is Mr. Jared Steely, Contract Operator. Mr. Steely is a Grade D2 certified distribution system operator and a Grade T2 certified treatment operator. All work done on the water system is under the direction of Mr. Steely. Mr. Steely visits the School at least once a month and is available to be contacted within one hour. As a nontransient-noncommunity water system, the School's water system is required to have at least a D1 certified chief operator. The School meets the requirements for a certified distribution system operator. Small repairs are performed under the direction of Mr. Steely. Larger repairs are contracted out.

## **2.7 CROSS-CONNECTION CONTROL PROGRAM**

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. During the inspection it was noted that the School has at least one backflow prevention device located within the distribution system on the irrigation line. The 2014 electronic annual report indicates that there are no backflow prevention devices installed in the system. According to the electronic annual report, a cross-connection control survey has never been conducted on the system in the past. The Division requires that all water systems conduct a cross-connection control survey to identify possible cross-connections in the system.

The School must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The School must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years. A copy of the cross-connection control survey must be submitted to the Division by January 31, 2016. The guidelines on cross connection survey are enclosed as Attachment D.

## **2.8 ELECTRONIC ANNUAL REPORT AND COMPLAINT PROGRAM**

All public water systems are required to submit an EAR to the Division for the previous year (January 31 through December 31). The Division only has on file the EARs for last year. The School submitted the 2014 EAR and the Division deemed this report complete.

In 2014, there were no water quality complaints reported in the EAR or to the Division about the School. The School should keep records of all water quality complaints received, actions taken to correct the problem and maintenance performed. These records should be made available for review by the Division during routine inspections, if requested, and reported annually on the Electronic Annual Report.

## **2.9 EMERGENCY NOTIFICATION PLAN**

The School has an Emergency Notification Plan (ENP) on file dated January 5, 2000. Mr. Alex Cortinas, and Mr. Daniel Chavez are listed as the primary emergency contacts for the School. The ENP on file does not reflect changes in School staff or Division staff. As such, an updated ENP is required. The standard plan method of notifying customers is achieved by giving each student a notice to take home to parents.

*By January 31, 2016, an updated ENP must be submitted to the Division with current School District staff and on the Division's form. A template for the ENP can be found in Attachment E.*

## **2.10 CONSUMER CONFIDENCE REPORT (CCR)**

The School is required to distribute a CCR to each customer in their service area by July 1st of each year. A copy of the CCR and the certification letter must be submitted to the Division by October 1st of each year. The Division received the 2014 CCR and the certification form on July 2, 2015.

## **III. SOURCE WATER QUALITY MONITORING**

### **3.1 Source Water Assessment Program (SWAP)**

The source water assessment (SWAP) for Well No. 1 was completed by Merced County Environmental Health Department in May 2002. The source is considered most vulnerable to machine shops, septic systems, sewer collection systems and irrigation/agricultural wells. However, the no contaminants associated with these activities have been detected in the water produced by the well. The vulnerability information from the SWAP must be included in the CCR each year.

### **3.2 Water Quality and Monitoring**

The School is required to monitor the water produced by Well No. 1 in accordance with the monitoring requirements for nontransient-noncommunity water systems. A water quality monitoring schedule is included in Attachment F. Attachment G contains a monitoring



schedule for Well No. 1 that includes the date of the last sample as well as when the next sample is due. The Last Sample/Next Due Monitoring Schedule can be used to assist with scheduling future rounds of water quality monitoring.

### **General Mineral, General Physical and Inorganic Chemicals**

General mineral, general physical and inorganic chemical monitoring is required to be completed once every three years from Well No. 1. Once initial monitoring is complete only primary inorganic monitoring is required. Initial monitoring consists of one sample with results below the respective MCL's. Initial monitoring for inorganic chemicals is complete and the well was last monitored for inorganic chemicals in May 2013; all results were below the respective maximum contaminant levels (MCLs). The next round of sampling for the well is due by May 2016.

The State's Water Quality Inquiry database did not contain any results for general physical characteristics. The School must ensure that general physical characteristics are monitored for when the next round of monitoring is completed in May 2016.

### **Nitrate**

Nitrate monitoring is required to be completed annually if the concentration is less than one-half the MCL for nitrate, as  $\text{NO}_3$ , ( $< 23.0$  mg/L). If the concentration of nitrate (as  $\text{NO}_3$ ) is greater than one-half of the MCL, the monitoring frequency will increase to quarterly for at least one year. The School is required to conduct annual nitrate monitoring from Well No. 1. The last round of nitrate monitoring was completed in May 2015, with results of 19.0 mg/L. Well No. 1 is due to be sampled for nitrate (as  $\text{NO}_3$ ) in May 2016.

In July 2015, the Division revised the maximum contaminant level for nitrate to 10 mg/L as N (nitrogen). As such, all nitrate analyses have to be completed and reported as nitrate at nitrogen. The School should ensure that the analytical laboratory reports future nitrate results as N (nitrogen).

### **Nitrite**

Nitrite is required to be monitored once every three years if monitoring is below the nitrite MCL of 1,000  $\mu\text{g/L}$ . The last nitrite sample was collected in May 2013; the well had results at non-detectable levels. The next round of nitrite monitoring is due by May 2016 for the well.

### **Arsenic**

On January 23, 2006, the U.S. Environmental Protection Agency (USEPA) adopted a revised maximum contaminant level (MCL) for arsenic of 0.010 mg/L (milligrams per liter) or 10  $\mu\text{g/L}$  (micrograms per liter). The Division also adopted the revised arsenic MCL of 10.0  $\mu\text{g/L}$  on November 28, 2008. The School is required to monitor for arsenic once every three years as long as the results are below the arsenic MCL. If results are greater than the MCL, quarterly monitoring is required for one year to determine compliance with the MCL. The last



round of arsenic monitoring from Well No. 1 was conducted in May 2013, with a result of 2.8µg/L. The next round of arsenic monitoring is due by May 2016 for Well No. 01.

### **Perchlorate**

Perchlorate is an acute inorganic chemical that is required to be monitored for once every three years, after initial monitoring is complete. The initial monitoring consists of two samples collected 5 to 7 months apart, with non-detectable results. The initial monitoring has been completed and the last round perchlorate monitoring was conducted in July 2015, with non-detectable levels. The next round of perchlorate monitoring is due by July 2018.

### **Hexavalent Chromium (Chromium VI)**

Effective July 1, 2014, the Division of Drinking Water adopted an MCL of 10.0 µg/L for hexavalent chromium (chromium VI) for community and nontransient-noncommunity water systems. The regulation required all applicable public water systems to complete initial monitoring for chromium VI by December 31, 2014. Initial monitoring consisted of a single sample for hexavalent chromium collected from each active source. Hexavalent chromium results collected between July 1, 2012, and July 1, 2014, may be grandfathered. Future monitoring for hexavalent chromium can consist of total chromium monitoring if initial hexavalent chromium results are less than 10 µg/L.

The School collected the required hexavalent chromium sample from Well No. 1 to complete the initial monitoring on October 9, 2014, with a result of 1.2 µg/L. The School can begin monitoring for total chromium once every three years; the next total chromium sample is to be collected in 2017.

### **Volatile Organic Chemicals (VOCs)**

Volatile organic chemical (VOC) monitoring is required once every six years for all active sources after initial monitoring is complete. Initial monitoring consists of two consecutive quarters of monitoring with all non-detectable results before being reduced to once every six years. The records indicate that the initial monitoring has not been completed for Well No. 1. However, samples were taken in May 2007 and May 2013 with non-detectable results. The initial monitoring of the well is being waived due to the historical results of the well. The next round of VOC monitoring is due in 2019.

### **Synthetic Organic Chemicals (SOCs)**

Based on the PTGA monitoring schedule, the School is required to monitor Well No. 1 for alachlor, atrazine, simazine, dibromochloropropane (DBCP) and ethylene dibromide (EDB) every three years once initial monitoring is complete. Initial monitoring consists of two consecutive quarters of monitoring with all non-detectable results before being reduced to once every three years. Initial monitoring for the well has not been completed. However, monitoring for alachlor, atrazine, simazine, (DBCP) and (EDB) has been completed at three year intervals for three samples. The results of the monitoring have been reported as below the detectable levels for all the constituents and therefore, initial monitoring has been waived.

The last round of monitoring for alachlor, atrazine and simazine was conducted in May 2013; and January 2015 for DBCP and EDB, with all results reported as non-detectable. The next round of monitoring is due by November 2016 for alachlor, atrazine, and simazine; and January 2018 for DBCP and EDB.

### **Radiological**

The California Radionuclide Rule became effective on June 11, 2006. Initial monitoring requirements under the California Radionuclide Rule consist of four consecutive quarters of sampling. If the first two quarterly sample results are less than the DLR, the final two quarters of sampling may be waived. If the gross alpha activity is more than 5 pCi/L, uranium must be analyzed. Analysis results for uranium may be used to obtain the total radium activity (Gross alpha - Uranium = Radium 226). If the gross alpha activity is more than 15 pCi/L, analysis for uranium must be performed.

Initial radiological monitoring consists of four consecutive quarters for gross alpha. Well No. 1 was monitored for gross alpha activity in 2007, 2008 and 2009 and all of the results were below the DLR for gross alpha. As such, the final quarterly sample for gross alpha activity has been waived. The future monitoring frequency for gross alpha activity is one sample every nine years. The next monitoring for gross alpha activity at Well No. 1 has to be completed in 2018.

### **Raw Water Bacteriological Monitoring**

Because the School does not continuously disinfect its drinking water, there is no requirement to monitor Well No. 1 for bacteriological contaminants. It should be noted that the raw water source must be monitored for E. coli bacteria if a routine distribution sample is ever positive for total coliform, as required by the California Groundwater Rule.

## **3.3 Distribution System Water Quality Monitoring**

### **Bacteriological – Distribution System**

Based on the size of the School, one bacteriological sample per month is required to be collected within the distribution system and analyzed for total coliform bacteria. A review of the bacteriological data submitted since March 2014 revealed that there have been no violations.

Based on the School's files the last bacteriological sample siting plan (BSSP) is dated 2008. The BSSP on file is not in the format that the Division requires so during the inspection, the Division created an updated BSSP for the School's water system. The updated BSSP identifies five routine distribution sites and the associated repeat sample sites. A copy of the updated BSSP is included in Attachment H. If the attached BSSP is acceptable, please sign, date and return to the Division by **January 31, 2016**. The School must ensure that the contract operator and the analytical laboratory have a copy of the updated BSSP.

Since the School is required to collect one distribution bacteriological sample per month, five routine bacteriological samples need to be collected the month following a positive

bacteriological sample in the distribution system. Additionally, special monitoring is required anytime the pressure drops below 5 pounds per square inch (psi).

Per the California Groundwater Rule whenever a positive total coliform bacteria sample is collected in the distribution system, triggered source monitoring is required. Triggered source monitoring consists of collecting a total coliform and E.coli bacteria sample from all sources that were online at the time the positive sample was collected in the distribution system. The updated BSSP identifies the wellhead as the third repeat sample site for each routine site to ensure compliance with the California Groundwater Rule.

### **Lead and Copper Rule Monitoring**

The Lead and Copper Rule requires the Water Systems to monitor for lead and copper levels at five locations in the distribution system. There are four rounds of initial monitoring before the frequency can be reduced to triennial monitoring (two rounds of six month monitoring and two rounds of annual monitoring). The School has completed the initial monitoring, and is now required to conduct triennial monitoring. The 90<sup>th</sup> percentile result should be less than the action levels for lead and copper, 0.015 mg/L and 1.3 mg/L, respectively. The last round of lead and copper tap monitoring was completed in July 2015, with results of 0.0065 mg/L and 0.027 mg/L for lead and copper, respectively. The next round of lead and copper tap monitoring must be completed in 2018 between the months of June through September. A summary of all of the lead and copper tap monitoring results is included in Attachment I.

## **IV. SYSTEM APPRAISAL**

The water produced by Well No. 1 meets all primary and secondary drinking water standards. The School is in good overall condition and is capable of supplying safe and potable water to customers. All water quality monitoring for the School is up-to-date. The School needs to submit an updated Emergency Notification Plan to reflect current personnel at the School as well as the notification methods to be used in the event of an emergency.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

It is the findings of the State Water Resources Control Board - Division of Drinking Water that the Planada Elementary School Water System is capable of supplying water that complies with all primary and secondary drinking water standards. It is, therefore, recommended that a domestic water supply permit be granted to the Planada Elementary School Water System to continue operation of the existing system subject to the following provisions:

1. The permitted active source for the Planada Elementary School is Well No. 1 (PS Code 2400066-001). The Merced District Office of the Drinking Water Field Operations Branch (DWFOB) must permit all other sources before they can be used in the water system.

2. The Planada Elementary School must comply with the attached water quality monitoring schedule for Well No. 1. All water quality monitoring results obtained in a calendar month must be submitted to the Division via electronic data transfer (EDT) by the tenth day of the following month.
3. The Planada Elementary School shall submit plans and specifications for all proposed sources of supply and/or water treatment projects to the Division for review and approval prior to construction.
4. The Planada Elementary School shall submit an Annual Report to the Drinking Water Program (ARDWP) each year, documenting specific water system information for the prior year. The report shall be in a format specified by the Division.
5. The Planada Elementary School distribution system is classified as a D1 distribution system. As such, the School must have a chief operator that is certified as a D1 distribution system operator, or higher.
6. The Planada Elementary School must conduct a cross-connection control survey of the water system to identify and locate existing backflow preventers and determine possible contamination locations where backflow preventers would need to be installed. The School must test all backflow prevention devices once a year and conduct a cross-connection control survey once every five years. A copy of the cross-connection control survey must be submitted to the Division by January 31, 2016. The guidelines on cross connection survey are enclosed as Attachment D.

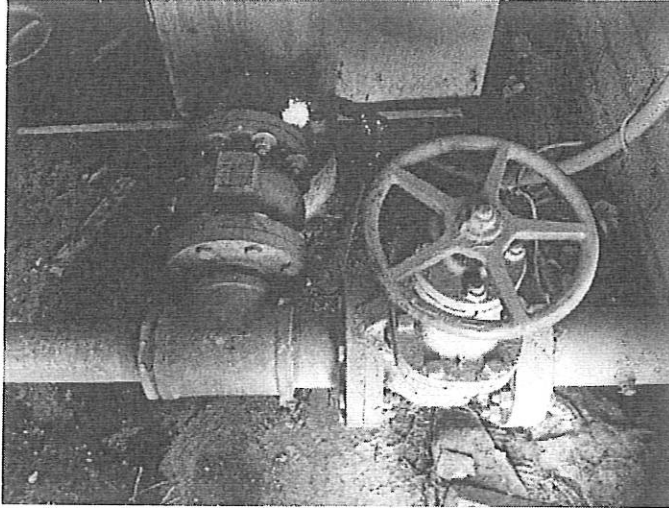
Report Prepared By:      Kassy D. Chauhan, P.E.  
Senior Sanitary Engineer

Attachment A: Inspection Photos – October 13, 2015  
Attachment B: Drought Contingency Plan  
Attachment C: Emergency Chlorination Plan Guidelines  
Attachment D: Cross-Connection Control Program Guidelines  
Attachment E: Emergency Notification Plan  
Attachment F: Water Quality Monitoring Schedule  
Attachment G: Last Sample/Next Due Water Quality Monitoring Schedule  
Attachment H: Bacteriological Sample Siting Plan  
Attachment I: Lead and Copper Tap Monitoring Summary

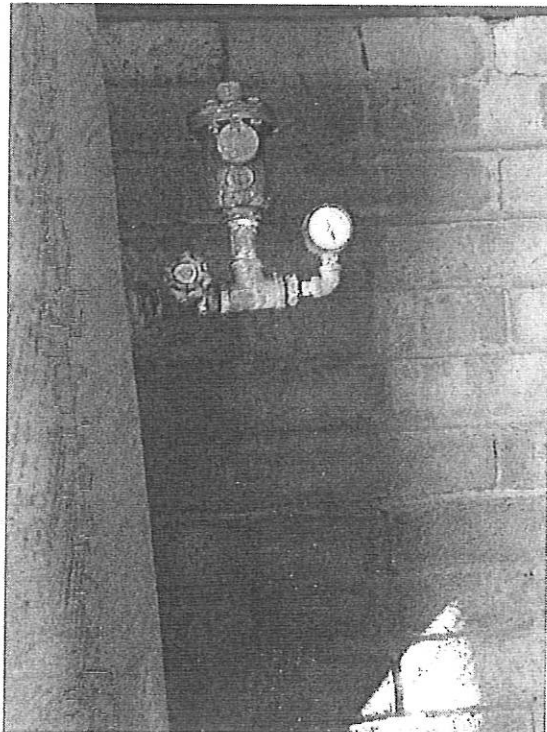
**ATTACHMENT A:**  
**INSPECTION PHOTOS – OCTOBER 13, 2015**



Inspection Photos  
Planada Elementary School  
System No. 2400066  
October 13, 2015

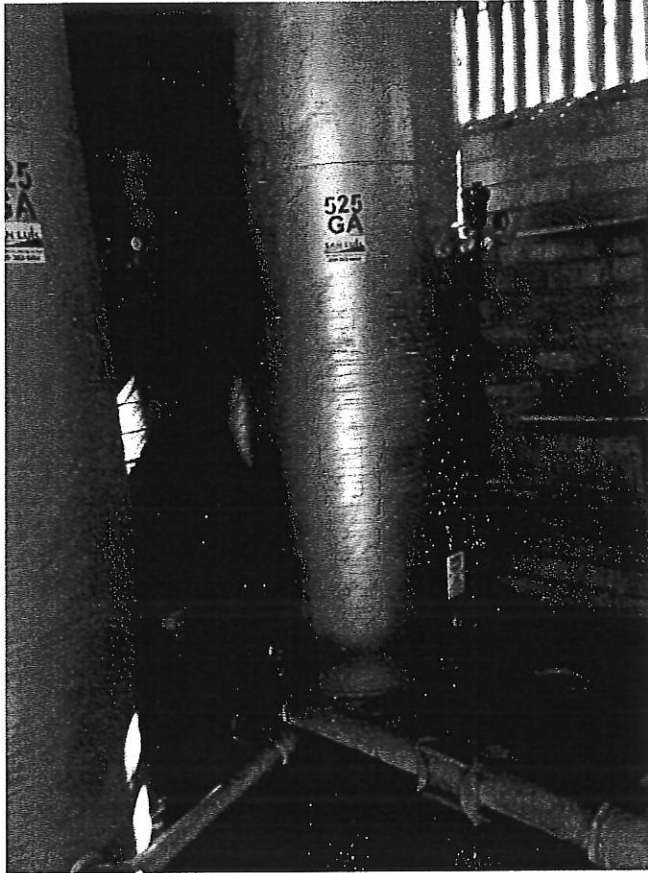


**Picture No. 1:** The sole source of supply for the Planada Elementary School is a well that is located in the southeast corner of the school grounds. The well contains a submersible pump. The well discharge piping includes a check valve and the water flows directly from the well to the steel pressure tanks. The School must install a flow meter on the discharge line to be able to record the production on a monthly basis. The well is housed in a concrete block building. The School needs to ensure that the area is cleaned periodically and is free of debris.



**Picture No. 2:** The water produced by Well No. 1 flows to the two 525-gallon steel pressure tanks. The steel pressure tanks are equipped with air relief valves that were leaking at the time of the inspection. The air relief valves need to be repaired/replaced. In addition, the vent on the air relief valves must be extended, inverted and screened.

Inspection Photos  
Planada Elementary School  
System No. 2400066  
October 13, 2015



**Picture No. 3:** System pressure is provided by the two 525-gallon steel pressure tanks that are housed in the same building as the wellhead.

**ATTACHMENT B:**  
***DROUGHT CONTINGENCY PLAN TEMPLATE***

## Drought Index and Management Strategy Template

<b>Drought Stage</b>	<b>Public Agency Actions</b>	<b>Requested Consumer Actions</b>	<b>Penalties (in progressive order)</b>
<b>Phase 1 – Warning</b> <ul style="list-style-type: none"> <li>• ____% Shortage</li> <li>• ____ Reductions</li> </ul>		<b>All Customers:</b>  <b>Industrial/Commercial Customers:</b>	<b>Water Waste Actions:</b>
<b>Phase 2 – Moderate</b> <ul style="list-style-type: none"> <li>• ____% Shortage</li> <li>• ____ Reductions</li> </ul>		<b>All Customers</b>  <b>Industrial/Commercial Customers</b>	<b>Water Waste Actions:</b>  <b>Exceeding Water Allocation Actions:</b>
<b>Phase 3 – Severe</b> <ul style="list-style-type: none"> <li>• ____% Shortage</li> <li>• ____ Reductions</li> </ul>		<b>All Customers</b>  <b>Industrial/Commercial Customers</b>	<b>Exceeding Water Allocation Actions</b>  <b>Water Waste Actions:</b>
<b>Phase 4 -- Critical</b> <ul style="list-style-type: none"> <li>• ____% Shortage</li> <li>• ____ Reductions</li> </ul>		<b>All Customers</b>  <b>Industrial/Commercial Customers</b>	<b>Exceeding Water Allocation Actions</b>

Last updated on: \_\_\_\_/\_\_\_\_/\_\_\_\_

Plan approved on: \_\_\_\_/\_\_\_\_/\_\_\_\_ Approved by: \_\_\_\_\_

# **ABC Water Company Drought Contingency Plan**

## **Section 1: Declaration of Policy, Purpose, and Intent**

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the ABC Water hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XI of this Plan.

## **Section 2: Authority**

(A) The ABC Water Company is a community water system that is governed by the Board of Directors of the ABC Water Company. As such, ABC Water Company is responsible for ensuring compliance with all applicable state and federal drinking water regulations. Specifically, the ABC Water Company is responsible for ensuring compliance with the Emergency Water Conservation Regulations.

## **Section 3: Public Education**

The ABC Water Company will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by the means deemed most appropriate and effective by the Board of Directors.

## **Section 4: Authorization**

The ABC Water Company is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The Board of Directors shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

## **Section 5: Application**

The provisions of this Plan shall apply to all persons, customers, and property utilizing water



provided by the ABC Water Company. The terms “person” and “customer” as used in the Plan may include individuals, corporations, partnerships, associations, and all other legal entities.

## **Section 6: Definitions**

For the purposes of this Plan, the following definitions shall apply:

**Aesthetic water use:** water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

**Commercial and institutional water use:** water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as schools, hospitals, clinics, retail establishments, hotels and motels, restaurants, and office buildings.

**Conservation:** those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

**Customer:** any person, company, or organization using water supplied by the ABC Water Company.

**Domestic water use:** water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

**Industrial water use:** the use of water in processes designed to convert materials of lower value into forms having greater usability and value.

**Landscape irrigation use:** water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, parks, and rights-of-way.

**Non-essential water use:** water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

- (a) irrigation of landscape areas, including parks, an athletic fields, except otherwise provided under this Plan;
- (b) use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle;
- (c) use of water to wash down any sidewalks, walkways, driveways, parking lots or other hard-surfaced areas;
- (d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
- (e) permitting water to run or accumulate in any gutter or street;
- (f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or

- Jacuzzi-type pools;
- (g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
- (h) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
- (i) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

## **Section 7: Criteria for Initiation and Termination of Drought Response Stages**

The ABC Water Company shall monitor water supply and/or demand conditions on a regular basis and shall determine when conditions warrant initiation or termination of each stage of the Plan, that is, when the specified "triggers" are reached.

The triggering criteria described below are based on:

- (A) Long or short term changes in measured source water well levels that would indicate that ground water aquifer(s) are being depleted at a rate that is unsustainable;
- (B) Sudden or gradual changes in source water quality that might indicate that a ground water aquifer is under stress from lack of recharge;
- (C) Any sudden or catastrophic loss of water storage or production capacity;
- (D) Any other loss of water production or storage capacity that could result in a threat to public health or safety.

## **Section 8: Drought Response Triggers**

### **Stage 1 - Abnormally Dry Conditions (Watch)**

#### **Requirements for initiation**

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section 6 (Definitions) when:

- (A) The one-year change in the static water level in the well(s) indicates a downward trend and the change in the depth of static water level exceeds 2 feet, or;
- (B) The state governor or local authority issues a drought declaration at Level/Stage 1, or;
- (C) Any combination of circumstances reduces the water system's overall water supply or production capabilities by 10% or more.

#### **Requirements for termination**

Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days.

### **Stage 2 - Moderate Conditions (Alert)**

#### **Requirements for initiation**

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section 6 of this Plan when:

- (A) The one-year change in the static water level in the well(s) indicates a downward trend and the change in the depth of static water level exceeds 4 feet, or;
- (B) The state governor or local authority issues a drought declaration at Level/Stage 2, or;
- (C) Any combination of circumstances reduces the water system's overall water supply or production capabilities by 20% or more.

#### Requirements for termination

Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 2, Stage 1 becomes operative.

### **Stage 3 - Severe Conditions (Warning)**

#### Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when:

- (A) The one-year change in the static water level in the well(s) indicates a downward trend and the change in the depth of static water level exceeds 6 feet, or;
- (B) The state governor or local authority issues a drought declaration at Level/Stage 3, or;
- (C) Any combination of circumstances reduces the water system's overall water supply or production capabilities by 30% or more.

#### Requirements for termination

Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 3, Stage 2 becomes operative.

### **Stage 4 - Extreme Conditions (Critical)**

#### Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 of this Plan when:

- (A) The one-year change in the static water level in the well(s) indicates a downward trend and the change in the depth of static water level exceeds 8 feet, or;
- (B) The state governor or local authority issues a drought declaration at Level/Stage 4, or;
- (C) Any combination of circumstances reduces the water system's overall water supply or production capabilities by 40% or more.

#### Requirements for termination

Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 4, Stage 3 becomes operative.

## **Stage 5 - Exceptional Conditions (Emergency)**

### Requirements for initiation

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 5 of this Plan when:

- (A) The one-year change in the static water level in the well(s) indicates a downward trend and the change in the depth of static water level exceeds 10 feet, or;
- (B) The state governor or local authority issues a drought declaration at Level/Stage 5, or;
- (C) Any combination of circumstances reduces the water system's overall water supply or production capabilities by 50% or more.

### Requirements for termination

Stage 5 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 3 consecutive days. Upon termination of Stage 5, Stage 4 becomes operative.

## **Section 9: Drought Responses**

The ABC Water Company shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section 9 of this Plan, shall determine whether a watch, alert, warning, critical, or emergency water shortage condition exists and shall implement the following notification procedures:

### **Notification**

#### Notification of the Public:

The customers of the ABC Water Company shall be notified by means of any or all of the following: Board meetings, inserts with utility bills, mailings, postings at the Water Company offices and facilities, flyers, or other means as designated by the Board. At its discretion the Board or its authorized designee shall also notify, or cause to be notified, agencies or organizations it believes may be affected.

### **Stage 1 Response -- Water Shortage WATCH Conditions**

**Target: Achieve a voluntary 10 percent reduction total water use.**

#### Voluntary Water Use Restrictions for Reducing Demand :

- (a) Water customers are requested to voluntarily limit the irrigation of landscaped areas to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and to irrigate landscapes only between the hours of midnight and 10:00 a.m. and 8:00 p.m. to midnight on designated watering days.

- (b) All operations of the ABC Water Company shall adhere to water use restrictions prescribed for Stage 1 of the Plan.
- (c) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

## **Stage 2 Response -- Water Shortage ALERT Conditions**

**Target: Achieve a 20 percent reduction in total water use.**

### Water Use Restrictions for Demand Reduction:

Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

- (a) Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems shall be limited to Sundays and Thursdays for customers with a street address ending in an even number (0, 2, 4, 6 or 8), and Saturdays and Wednesdays for water customers with a street address ending in an odd number (1, 3, 5, 7 or 9), and irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet filled bucket or watering can of five (5) gallons or less, or drip irrigation system.
- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public is contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
- (c) Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or Jacuzzi-type pools is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) Use of water from hydrants shall be limited to fire fighting, related activities, or



other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the ABC Water Company.

(f) All restaurants are prohibited from serving water to patrons except upon request of the patron.

(g) The following uses of water are defined as non-essential and are prohibited:

1. washdown of any sidewalks, walkways, driveways, parking lots, or other hard-surfaced areas;
2. use of water to wash down buildings or structures for purposes other than immediate fire protection;
3. use of water for dust control;
4. permitting water to run or accumulate in any gutter or street; and
5. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

### **Stage 3 Response -- Water Shortage WARNING Conditions**

**Target: Achieve a 30 percent reduction in total water use.**

#### **Water Use Restrictions for Demand Reduction:**

All requirements of Stage 2 shall remain in effect during Stage 3 except:

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, drip irrigation, or permanently installed automatic sprinkler system only. The use of hose-end sprinklers is prohibited at all times.
- (c) The use of water for construction purposes from designated fire hydrants under special permit shall be discontinued.

### **Stage 4 Response -- Water Shortage CRITICAL Conditions**

**Target: Achieve a 40 percent reduction in total water use.**

**Water Use Restrictions for Reducing Demand:** All requirements of Stage 2 and 3 shall remain in effect during Stage 4 except:

- (a) Irrigation of landscaped areas shall be limited to designated watering days between the hours of 6:00 a.m. and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight and shall be by means of hand-held hoses, hand-held buckets, or drip irrigation only. The use of hose-end sprinklers or permanently installed

automatic sprinkler systems are prohibited at all times.

- (b) Use of water to wash any motor vehicle, motorbike, boat, trailer, or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 6:00 p.m. and 10 p.m.
- (c) The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited.
- (d) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
- (e) No application for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be approved, and time limits for approval of such applications are hereby suspended for such time as this drought response stage or a higher-numbered stage shall be in effect.

#### **Stage 5 Response -- Water Shortage EMERGENCY Conditions**

**Target: Achieve a 50 percent or more reduction in total water use.**

**Water Use Restrictions for Reducing Demand:** All requirements of Stage 2, 3 and 4 shall remain in effect during Stage 5, and in addition:

**Public message to be disseminated by whatever means possible:**

*The ABC Water Company is confronted with a critical water shortage emergency of unprecedented proportions. At this time, there exists barely enough drinking water for the most essential human health, sanitation, and safety needs. As a result, **all outdoor water use is prohibited**. We understand the hardship this extraordinary condition poses to every customer, and we appreciate the sacrifices people are making to ensure that water system does not run dry. Everyone is urgently requested to do whatever necessary to maintain water use within or below their allotted amount.*

#### **Optional Response -- WATER ALLOCATION**

In the event that water shortage conditions threaten public health, safety, and welfare, the Board is hereby authorized to allocate water according to the following water allocation plan:

Customer/connection type	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Residential (Gallons per person per day)	200	100	75	50	25
Commercial/institutional	Normal	90% of average	85% of average	65% of average	50% of average
Landscape irrigation	Normal	90% of average	50% of average	0% of average	0% of average

### Single-Family Residential Customers

"Household" means the residential premises served by the customer's service connection. "Persons per household" include only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the ABC Water Company of a greater number of persons per household on a form prescribed by the Board. The Board shall make its best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer.

In prescribing the method for claiming more than two (2) persons per household, the Board shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with willful negligence falsely reports the number of persons in a household or fails to notify the Board of a reduction in the number of persons in a household shall be fined not less than \$ \_\_\_\_.

Residential water customers shall pay the following surcharges:

- \$ \_\_\_\_ for the first 1,000 gallons over allocation.
- \$ \_\_\_\_ for the second 1,000 gallons over allocation.
- \$ \_\_\_\_ for the third 1,000 gallons over allocation.
- \$ \_\_\_\_ for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

### Livestock

It is acknowledged that some residential customers may keep livestock. Such customers will be entitled to an allocation which will meet the minimum needs of the animals in accordance with the level of water restrictions in effect, or as shown in the following table, or as otherwise determined by the Board:

Type of animal	Daily water requirements (gallons per day)
Horse	12
Cow	20-45
Beef animal	8-12
Swine/pig	3-5
Sheep/goats	2-4
Poultry/fowl (per 100)	8-15

Residential customers with livestock should follow water conservation practices including repairing leaks, dripping faucets, minimizing waste in the filling of water tubs and tanks, and conserving water when cleaning floors and equipment.

#### **Section 10: Enforcement**

- (a) No person shall knowingly or intentionally allow the use of water from the ABC Water Company in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by Board, in accordance with provisions of this Plan.
- (b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than \_\_\_\_\_ dollars (\$) and not more than \_\_\_\_\_ dollars (\$\_\_\_). Each day that one or more of the provisions in this Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Board shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at \$\_\_\_\_\_, and any other costs incurred by the ABC Water Company in discontinuing service. In addition, suitable assurance must be given to the Board that the same action shall not be repeated while the Plan is in effect.
- (c) Any person, including a person classified as a water customer of the ABC Water Company, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

#### **Section 11: Variances**

The Board, may, in writing, grant a temporary variance for existing water uses otherwise

prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance, and if one or more of the following conditions are met:

- (a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
- (b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the Board within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the Board, and shall include the following:

- (a) Name and address of the petitioner(s).
- (b) Purpose of water use.
- (c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
- (d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
- (e) Description of the relief requested.
- (f) Period of time for which the variance is sought.
- (g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
- (h) Other pertinent information.



**ATTACHMENT C:**  
**GUIDELINES FOR PREPARATION OF AN EMERGENCY CHLORINATION PLAN**

**State Water Resources Control Board**  
Division of Drinking Water

**State Water Resources and Control Board**  
**July 2014**

**EMERGENCY DISINFECTION PLAN REQUIREMENTS**

An emergency disinfection plan, designed to outline procedures in the event of bacteriological contamination, shall be developed and a copy submitted to our office. The plan shall outline specific response procedures for disinfection of wells, pressure tanks, storage tanks and installation of emergency chlorination equipment. Guidance on the operation of the emergency disinfection equipment, to be included in the Emergency Disinfection Plan, is included in the attached document (Emergency Disinfection Plan Guidance).

The plan shall state that the necessary equipment is on-site or readily available and the means by which to connect and activate it have been provided. Those items needed to accommodate emergency chlorination equipment include:

- An all weather, 110 volt electrical receptacle, energized by the well pump operation.
- A three-quarter (3/4) inch threaded tap on the piping downstream of the well check valves for use as a chlorine injection point.
- A sample tap (non-threaded) at least three to six feet downstream of the chlorine injection point.

The plan should further state that qualified personnel (specify who) are under contract to carry out the plan and install, adjust and operate the equipment as necessary. The plan should also include the treatment or distribution operator certification grade and emergency telephone numbers of water system staff and certified operator(s).

*Attachment: Emergency Disinfection Plan Guidance*

## **Emergency Disinfection Plan Guidance for Public Water Systems**

The purpose of this Emergency Disinfection Plan (EDP) is to assist utilities implement emergency chlorination. The guidance provided below is designed to facilitate the installation of emergency chlorination equipment and to assist in the setting of chemical dosage in order to maintain acceptable free chlorine residual needed to insure public health protection immediately after a disaster. Items which should be obtained prior to the onset of a disaster include the following equipment:

1. Emergency chlorination units.
2. Chlorine residual test kits (preferably DPD)
3. Granular Calcium Hypochlorite, 65% available chlorine, (liquid sodium hypochlorite has a relatively short shelf life so it is advisable that it not be purchased in advance). Chemicals used for emergency chlorination must be approved under ANSI/NSF<sup>1</sup> Standard 60 (direct additives).

### **Installation Procedures**

A utility should not wait until an emergency has occurred before it attempts to install its emergency chlorination equipment. It is advisable that all field maintenance staff be familiar with the installation procedures in order to quickly install the emergency chlorination equipment. The remainder of this plan addresses the use of hypochlorinators in the event of an emergency. For those utilities which use gas chlorination units, they should already be familiar with their operation if they are using this type of equipment.

The chlorination equipment purchased by the utility must be adequately sized for the proposed installation. The feed capacity of the hypochlorinator should allow the utility to do at a minimum of 5 parts per million free chlorine residual. After the emergency chlorination units have been physically connected to the wells and/or other sources in question, refer to the attached table or use the following procedures to calculate the appropriate settings. If you are unable to perform these calculations, contact a staff of the Drinking Water Program immediately.

The attached tables may be used to mix a solution of a known strength. Decide on a solution strength that you wish to use and find the amount of chlorine needed for a 100 gallon barrel from Table 1.

Table 2 can be used to determine the volume of solution to be added for different flow rates for each mg/L of chlorine dosage. It should be recognized that large capacity wells will need stronger solution strengths or the feed barrel will need to be filled too frequently. The volumes in table 2 are in gallons per day (gpd). If the feed pump capacity is given in gallons per hour, then the volume from Table 2 must be divided by 24 to give a gph value.

To determine the appropriate pump setting, the value from Table 2 must be divided by the feed pump capacity.

Example:

Feed Pump Capacity = 10 gph; Q = 1500 gpm; 7% solution; 5 mg/L dosage

From table 2 → Chlorine Volume = 30.9 gpd for each mg/L.

For 5 mg/L →  $5 \times (30.9) = 154.5$  gpd

Since feed pump has a maximum capacity of 10 gph, the appropriate length of stroke setting is:

$$\frac{154.5 \times 24}{10 \text{ gph}} = 0.64$$

Outlined below are the equations to use if the Tables are not used:

1. A solution barrel of a known volume must be obtained. The barrel should be filled with a known volume of water. To this volume, a known weight of chemical should be added. The solution strength must be determined using the equation given below:

$$\% \text{ solution} = \frac{\text{Weight of chemical added to solution barrel (lbs)} \times 100}{\text{Weight of water in solution barrel (lbs)}}$$

(1 gallon of water weighs 8.34 lbs)

A 6% solution can be obtained by adding one half pound of chemical per gallon of water using a 100 gallon barrel. (see below):

$$50 / (100 \times 8.34 \text{ lb/gal of water}) \times 100 = 5.99 \text{ or } 6\%$$



used to get percentage

To calculate the pounds per hour of chemical that must be added to obtain a known chlorine concentration, the following equation must be used:

Equation #1:

$$\text{lbs per hour of chemical} = 8.34 \times \text{desired dosage in ppm} \times \text{flow rate in gpm} \times 60 \text{ min}/1,000,000$$

Assuming the desired dosage is 5 ppm that gives the following equation:

Equation #2: lbs per hour of chemical =  $2.5 \times 10^{-3}$  x flow rate in gpm

Next you must determine the required gallons per hour of chemical to be added. This must be obtained using the following equation:

Equation #3:

gallons per hour of chemical = lbs per hour / 8.34 / solution strength / 100 (from above)

Once this value has been obtained, then the next step is to review the maximum feed rate in gallons per day of the chemical feed pump. This is generally printed in a label attached to the pump and it may specify the discharge pressure this maximum rate applies to. Most chemical feed pumps have either a length of stroke setting or two settings for frequency of stroke and length of stroke. To determine what settings should be used, a review of the instrumentation on the pump must be conducted.

If two control settings are provided, then set the frequency control at 100% and provide adjustment only to the length of stroke adjustment. The equation to be used to determine at what setting the length of stroke should be, is given below:

Percent length of stroke = gallons per hour (obtained above) x 24 x 100 / the pump capacity in gpd

This numerical setting should be used when adjusting the pump. If both pump settings are to be changed from 100%, then the percent stroke equation is as follows:

Percent length of stroke = gallons per hour x 24 x 100 / stroke frequency / pump capacity in gpd

A check on the actual dosage can be performed by using the total gallons of solution pumped within a known operating period. That information can be used as follows:

Actual Dosage =  $\frac{\text{gallons of solution} \times \text{solution strength}}{\text{gallons of water treated in MG}}$

An easier way to use hypochlorination equipment is to have calibration or volumetric feed cylinders installed on the intake line to the pump. If these cylinders are available, then a known volume of solution can be pumped and the time it takes to pump that volume is used to determine gallons per hour at a known discharge pressure. The actual percent solution must still be known to conduct the other calculations.

Once a utility has implemented emergency chlorination of their system, it is important to conduct follow up distribution chlorine residual monitoring to determine the effectiveness of the chlorination process. In the event of an emergency, hypochlorination equipment should be used to dose the system at 2 ppm of free chlorine residual. Chlorine residual monitoring within the distribution system should take place to verify that an adequate residual is being obtained



at all locations within the distribution system. Any areas which have suppressed chlorine residuals should receive further investigation to determine whether or not there are other problems associated with the reduced residuals.

Flushing should be provided if possible, to draw the chlorinated water into the distribution system as soon as possible.

In addition to the chlorine residual monitoring, bacteriological sampling of the distribution system in all areas should be conducted. Chlorine residual monitoring in addition to bacteriological sampling should be used to further define areas of distribution system that need additional investigation. Chlorination of the system should continue until it has been verified that no structural problems exist within the distribution system and all bacteriological monitoring shows that there is no presence of pathogenic organisms.

**TABLE 1**  
**AMOUNT OF CHLORINE PER 100 GALLON BARREL\***

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Type of Chlorine												
5% Sodium Hypochlorite**		60 gal	80 gal	100 gal								
12.5% Sodium Hypochlorite**		24 gal	32 gal	40 gal	48 gal	56 gal	64 gal	72 gal	80 gal	88 gal	96 gal	
65% Calcium Hypochlorite***		38 lbs	51 lbs	64 lbs	77 lbs	90 lbs	103 lbs	116 lbs	128 lbs	141 lbs	167 lbs	

\* Add the quantity indicated to the 100 gallon barrel and then fill the remaining volume with water.

\*\* The sodium hypochlorite must be ANSI/NSF<sup>1</sup> certified for potable drinking water and approved as direct additive (ANSI/NSF Standard 60).

1: American National Standard Institute (ANSI) or National Sanitation Foundation (NSF)

\*\*\* HTH, tablets or granular chlorine

Example: For 10% solution using 12.5% sodium hypochlorite, use 80 gallons of sodium hypochlorite and add 20 gallons of water.

Example: For 10% solution using 65% available Calcium Hypochlorite (CaHOCl), use 128 lbs of granular chlorine and add water to fill barrel and mix.

**TABLE 2**  
**CHLORINE VOLUME REQUIRED GALLONS PER DAY (GPD) PER MG/L OR PPM OF**  
**DESIRED CHLORINE DOSAGE\***

	Solution Strength	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%
Flow Rate												
50 gpm		2.4	1.8	1.4	1.2	1.03	0.9	0.8	0.7	0.7	0.6	0.6
75 gpm		3.6	2.7	2.0	1.8	1.5	1.4	1.2	1.0	1.0	0.9	0.8
100 gpm		4.8	3.6	2.9	2.4	2.0	1.8	1.6	1.4	1.3	1.2	1.1
300 gpm		14.4	10.8	8.6	7.2	6.2	5.4	4.8	4.3	3.9	3.6	3.3
500 gpm		24.0	18.0	14.4	12.0	10.3	9.0	8.0	7.2	6.6	6.0	5.5
800 gpm		38.4	28.8	23.0	19.2	16.5	14.4	12.8	11.5	10.5	9.6	8.9
1000 gpm		48.0	36.0	28.0	24.0	20.6	18.0	16.0	14.4	13.1	12.0	11.1
1500 gpm		72.0	54.0	43.2	36.0	30.9	27.0	24.0	21.6	19.6	18.0	16.6
2000 gpm		96.0	72.0	57.6	48.0	41.1	36.0	32.0	28.8	26.2	24.0	22.2

\* Values in the Table are the flow rates in gallons of solution per day that be added for each mg/L of desired dosage.

Example: Well Discharge = 1,000 gpm  
 Solution Strength = 5%  
 Desired Dosage = 5 mg/L or 5 ppm

From Table 2, Need to add 28.8 gpd per mg/L (or ppm)  
 Therefore, 5 mg/L x 28.8 gpd/(mg/L) = 144 gpd.

***ATTACHMENT D:  
GUIDANCE FOR CROSS-CONNECTION CONTROL SURVEY***

# **CROSS-CONNECTION CONTROL NON-COMMUNITY WATER SYSTEMS SWRCB-MERCED DISTRICT**

## Purpose of Cross-Connection Control Program

Water provided by a public water system may be contaminated via cross-connections within the user's distribution system. The purpose of the cross-connection control program is to eliminate actual cross-connections and to reduce the hazard of potential cross-connections. This is accomplished by identifying actual and potential cross-connections and either installing appropriate backflow prevention assemblies or ensuring that water-using equipment is installed in accordance with plumbing code requirements and good practice.

## What are cross-connections?

Cross-connections are unprotected connections between a potable water system and any source or system containing unapproved water or a substance, which is not safe. Examples of cross-connections include:

1. Improperly installed irrigation systems (which may allow back siphoning of stagnant, bacterially contaminated water into the piping system) or premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.
2. Improperly plumbed water-using devices such as hot tubs, boilers or commercial dishwashers.
3. Irrigation systems served by an auxiliary source, such as an unapproved well or a creek. Such systems, if connected to the drinking water system, create a potential for contamination via cross-connections.
4. Interconnections between the potable system and a non-potable system.

## How to Comply

For Non-community water systems, the program consists of identification of hazards and protection of the system from these hazards. The program is to be adapted to the size and complexity of the system. The following are the required elements and necessary actions:

1. Identification of Hazards -This consists of a review of the system facilities to identify areas of potential contamination via cross-connections. A survey of the system is to be conducted with documentation of the findings. Any facilities that handle wastewater or hazardous liquids require special evaluation to ensure protection of the potable system from contamination.
2. Protection of System -Taking action to abate the potential cross-connection by ensuring compliance with plumbing codes, installing and maintaining appropriate backflow prevention assemblies and other means. This includes annual testing and repair or replacement as needed.

## Completion and Documentation

Attached is additional information and forms that you can use to help guide you through this program. A survey of the system is to be conducted by a qualified person. Documentation of the survey findings is to be maintained and submitted to the Department when requested.

Attachments - Information and forms for surveys

- Notes: 1. Regulatory Authority: Pursuant to Section 7584 of the California Code of Regulations, which states, "The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program".
2. Applicability: Non-community water systems



## ELEMENTS OF A CROSS-CONNECTION CONTROL PROGRAM CDPH Merced District

When implementing a Cross-Connection Control Program, the water supplier or health agency should follow an organized plan. The following items should be included as a minimum. The items **explain the Department of Health Services' policy regarding the regulations.**

### **7584. Responsibility and Scope of Program**

The water supplier shall protect the public water supply from contamination by implementation of a cross-connection control program. The program, or any portion thereof, may be implemented directly by the water supplier or by means of a contract with the local health agency, or with another agency approved by the health agency. The water supplier's cross-connection control program shall for the purpose of addressing the requirements of Sections 7585 through 7605 include, but not limited to, the following elements:

(a) *The adoption of operating rules or ordinances to implement the cross-connection program.*

A public water supplier shall enact an ordinance or rule of service outlining the cross-connection control program and providing enforcement authority.

(b) *The conducting of surveys to identify places where cross-connections are likely to occur.*

Water utilities do not have any responsibility for controlling or abating cross-connections on a user's premises. All existing facilities where potential cross-connections are suspected, however, shall be listed and inspected or reinspected on a priority basis, where feasible. All applications for new services or for enlarging existing services or changing of occupant shall be reviewed or screened for cross-connections hazards. Surveys are intended to be conducted by a person certified by AWWA or ABPA as a cross-connection specialist. A list of persons that have this certification may be obtained by contacting AWWA at (909) 481-7200, ABPA at <http://www.abpa.org/>, or by contacting the CDPH-Fresno District office.

(c) *The provision of backflow protection at the user's connection or within the user's premises or both.*

Adequate provisions for implementation and enforcement of backflow protection where needed including the shutting off service when necessary

(d) *The provision of at least one person trained in cross-connection control to carry out the cross-connection program.*

**Specific units of the health agency and/or water supplier should be designated to organize and carry out the cross-connection control program. The personnel in those units should be trained as to the causes and hazards of unprotected cross-connections.**

(e) *The establishment of a procedure or system for testing backflow preventers.*

A list of approved backflow preventers and list of certified testers should be made available to each water user required to provide backflow protection.

The list may include backflow devices approved by University of Southern California, Foundation for Cross-Connection Control and IAPMO, which may be found on the CDPH website at the following address:

The List of certified testers may be lists developed by the American Water Works Association and local county health agencies.

Backflow preventers should be tested at least yearly or more often as required by the health agency or water supplier.

*(f) The maintenance of records of locations, tests and repairs of backflow preventers*

Adequate records should be kept and filed for reference. These records should include, in addition to the name of the owner of the premises, the:

- a) Date of inspection
- b) Results of inspection
- c) Required protection
- d) List of all backflow preventer devices in the system
- e) Test and maintenance reports
- f) All correspondence between the water supplier, the local health authority, and the consumer
- g) Records must be maintained for a minimum of three years

**Records of inspection and testing should be evaluated to determine if:**

- a) Devices are frequently or sufficiently reviewed to detect failure.
- b) There are unusual feature of a particular model of device or component.
- c) Cause of failure can be eliminated.

**A program should be established to notify the water user when his backflow preventer must be tested. (A minimum of once each year is required.) After installation or repair, a backflow preventer should be tested and approved before it is accepted.**

**7605. Testing and Maintenance of Backflow Preventers**

Regulations require the following regarding testing and maintenance of backflow prevention devices:

- (a) The water supplier shall assure that adequate maintenance and periodic testing are provided by the water user to ensure their proper operation.
- (b) Backflow preventers shall be tested by persons who have demonstrated their competency in testing of these devices to the water supplier or health agency.
- (c) Backflow preventers shall be tested at least annually or more frequently if determined to be necessary by the health agency or water supplier. When devices are found to be defective, they shall be repaired or replaced in accordance with the provisions of this Chapter.
- (d) Backflow preventers shall be tested immediately after they are installed, relocated or repaired and not placed in service unless they are functioning as required.
- (e) The water supplier shall notify the water user when testing of backflow preventers is needed. The notice shall contain the date when the test must be completed.
- (f) Reports of testing and maintenance shall be maintained by the water supplier for a minimum of three years.

## **GUIDELINES FOR CROSS-CONNECTION CONTROL FOR IRRIGATION SYSTEMS**

**Summary:** Public water systems must be protected from actual and potential cross-connections between irrigation systems and domestic water systems. This is accomplished by ensuring that the irrigation system is installed in accordance with the requirements of the Uniform Plumbing Code with appropriate backflow prevention devices.

**Special Conditions:** For systems with an unapproved auxiliary source serving the irrigation system, additional protective action is necessary to guard against introduction of water from the auxiliary source into drinking water system. The following actions must be taken to guard against this hazard:

1. Identify all interties between the domestic system and the irrigation system.
2. Either disconnect these interties or install approved backflow prevention devices at each intertie. A Reduced Pressure Principle backflow prevention device is the type of device, which is to be installed.
3. Verify that there are no other interconnections between the domestic and irrigation systems. This is accomplished by draining the irrigation system and verifying that it does not refill with water from the domestic system through an undetected cross-connection. This procedure should be repeated on a period basis (once every three months).

**Records:** Maintain written records of dates of tests, procedures, results and corrective actions taken.

**CROSS-CONNECTION SURVEY SUMMARY FORM  
NON-COMMUNITY WATER SYSTEMS**

System Name \_\_\_\_\_ Number \_\_\_\_\_

Date of Survey \_\_\_\_\_

Name of person performing survey \_\_\_\_\_

Qualifications of person performing survey \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Description of Survey (Elements of survey, how conducted, hazards identified):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Actions taken (Include description of corrections, backflow prevention assemblies installed):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Long-term (Include description of who will ensure ongoing protection of the system from cross-connections and testing of backflow prevention assemblies):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other (Include other elements of program):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name of person completing this report \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

***ATTACHMENT E:  
EMERGENCY NOTIFICATION PLAN TEMPLATE***





EDMUND G. BROWN JR.  
GOVERNOR



MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

## State Water Resources Control Board

Division of Drinking Water

System No.: \_\_\_\_\_

### WATER QUALITY EMERGENCY NOTIFICATION PLAN

Name of Utility: \_\_\_\_\_

Physical Location Address: \_\_\_\_\_

The following persons have been designated to implement the plan upon notification by the Division of Drinking Water, SWRCB that an imminent danger to the health of the water users exists:

Water Utility: Contact Name & Title	Email Address	Day	Telephone	
			Evening	Cell
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____

The implementation of the plan will be carried out with the following DDW-SWRCB and County Health personnel:

DDW-SWRCB & County Health Departments:		Telephone	
Contact Name & Title		Day	Evening
1. Kassy D. Chauhan, P.E. – Merced District Engineer DDW-SWRCB		(559) 447-3300	(559) 385-5014 (cell)
2. Ron Rowe, Env. Health Director, Merced County Environmental Health		(209) 381-1100	

3. If the above personnel cannot be reached, contact:

**Office of Emergency Services Warning Center (24 hrs) (800) 852-7550 or (916) 845-8911**  
When reporting a water quality emergency to the Warning Center, please ask for the State Water Resources Control Board – Division of Drinking Water Duty Officer.

### NOTIFICATION PLAN

#### NOTIFICATION PLAN

☐ **STANDARD PLAN:** Please check if you agree to notify customers by door-to-door contact or written handout sheets. It is important that the people going door-to-door are coordinated and trained so they distribute copies to the designated areas of the water system. Maps of the specific areas that the notices are to be distributed should be provided to the customers.

☐ **ALTERNATE PLAN:** Please check if you propose to use another method, and attach the alternate plan to this form.

Report prepared by: \_\_\_\_\_

Signature and Title \_\_\_\_\_

Date \_\_\_\_\_

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

265 West Bullard Avenue, Suite 101, Fresno, CA 93704 | [www.waterboards.ca.gov](http://www.waterboards.ca.gov)

## Guidance for Preparation of the Emergency Notification Plan

Good planning means having a thought out process that has sufficient detail so it can be implemented as quickly as possible. Also, contact with your local county health department, which regulates commercial food service providers (restaurants), and possibly the Food and Drug Branch of the California Department of Public Health, which regulates food processors, will need to be made. Templates (fill in the blank) for the public notices and instructions can be obtained from our Department's website at

[http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/notices.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/notices.shtml)

We recommend that the following items be addressed in your plan:

- The names, titles, and phone numbers of the water system personnel who are responsible and authorized to implement the plan. A suggestion would be to include board members and civic organizations that may be available to assist.
- The names and phone number of newspapers, radio stations, TV stations, internet and other electronic media. Also, smaller and transient water systems may be able to use community bulletin boards and the post office.
- If a door-to-door method is used, the plan must specify who and how the notification will be carried out. It is important that the people going door-to-door are coordinated and trained so they distribute copies to the designated areas of the water system. Maps of the specific areas that the notices are to be distributed should be provided to the customers.
- Expect to receive follow-up phone calls and anticipate the questions that will be asked and have written responses for the persons answering the calls so consistent information is given. The persons answering the phones should *not* downplay the importance of the notification.
- Key facilities such as schools, hospitals, health/treatment centers, day care centers, convalescence homes, etc., should be directly notified by phone and/or hand notifications. Apartment and business owners/managers will need to be given sufficient copies and asked to distribute it to their tenants and employees. Your plan should list these facilities along with their contact information.

**SAMPLE PLAN ONLY**

**(Use only the text that applies to your water system)**

During regular working hours our people will contact the news media at television station KXYZ to broadcast the necessary warning. The local radio stations will also be contacted. The television and radio personnel are available at all hours. As a follow-up measure, we will also contact the Daily Bee, a local newspaper that serves both Ourtown and Hometown.

The warnings will be issued in both English and Spanish to cover all members of the community. Outlying areas of the water service area (such as Isolated Canyon and Lonesome Mountain subdivisions) will also be notified by sound truck and/or handbill distributed to their respective areas. Both of these areas are very small and this can be done quite quickly.

A special telephone answering service can also be quickly set up at the utility headquarters (using the regular company numbers) to answer questions that will come in from consumers. Questions are anticipated, especially from the Hometown area, because that area is served by three different water companies. A map will be available to the telephone answering personnel to determine the water company serving the caller.

It is anticipated that the time for notification to the television and radio audiences will be very short. The areas served by handbill and sound truck will also be notified within an hour. For notification to be issued in other than normal hours, the same media will be contacted and an announcement will be scheduled for as long as is necessary. A sound truck(s) will be used in the early morning hours to quickly alert the people not listening to their radio or television.

**ATTACHMENT F:  
WATER QUALITY MONITORING SCHEDULE**

WATER QUALITY MONITORING SCHEDULE  
Nontransient Noncommunity System, groundwater/agricultural (PTGA)  
UPDATED - September 2015

Chemical - Title 22	MCL (mg/L)	EPA Method	Frequency (1)
<b>Primary Inorganics - Section 64432</b>			
Aluminum	1		Every 3 years
Antimony	0.006		Every 3 years
Arsenic	0.010		Every 3 years
Barium	1		Every 3 years
Beryllium	0.004		Every 3 years
Cadmium	0.005		Every 3 years
Chromium (Total Chromium)	0.05		Every 3 years (2)
Hexavalent Chromium (Chrome 6)	0.010	218.6 or 218.7	1 sample (2)(3)
Cyanide	0.15		Waived
Fluoride	2.0		Every 3 years
Mercury	0.002		Every 3 years
Nickel	0.1		Every 3 years
Perchlorate	0.006		Every 3 years (4)
Selenium	0.05		Every 3 years
Thallium	0.002		Every 3 years
<b>Asbestos - Section 64432.2</b>			
Asbestos - Source Water	7 MFL		Waived
Asbestos - Distribution System sampling if Asbestos-Cement pipe used	7 MFL		Every 9 years if Aggressive Index $\leq 11.5$
<b>Nitrate/Nitrite - Section 64432.1</b>			
Nitrate (as N)	10		Annually if $\leq 5$ mg/L (5)
Nitrite (as nitrogen)	1		Every 3 years if $\leq 0.5$ mg/L (6)
Nitrate + Nitrite (sum as nitrogen)	10		N/A
<b>Secondary Standards - Table 64449-A</b>			
Aluminum	0.2		Once only
Color	15		Once only
Copper	1.0		Once only
Foaming Agents	0.5		Once only
Iron	0.3		Once only
Manganese	0.05		Once only
Methyl- <i>tert</i> -butyl ether (MTBE)	0.005	502.2, 524.2	See MTBE frequency on page 2
Odor	3		Once only
Silver	0.1		Once only
Thiobencarb	0.001		Waived
Turbidity	5		Once only
Zinc	5		Once only
<b>General Minerals - Section 64449</b>			
Bicarbonate	N/A		Once only
Carbonate	N/A		Once only
Hydroxide Alkalinity	N/A		Once only
Calcium	N/A		Once only
Magnesium	N/A		Once only
Sodium	N/A		Once only
Hardness	N/A		Once only
pH	N/A		Once only
<b>Secondary Standards - Table 64449-B</b>			
TDS	500-1000;1500		Once only
Specific Conductance	900-1600; 2200		Once only
Chloride	250-500;600		Once only
Sulfate	250-500;600		Once only

MCL = Maximum Contaminant Level

Contact your district office with any questions.

- (1) Sampling shall be increased to quarterly following any result  $>$  MCL.
- (2) After initial hexavalent chromium monitoring, total chromium may be used if total chromium results are  $<$  0.010 mg/L. If total chromium result is  $\geq$  0.010 mg/L, monitoring for hexavalent chromium will be required.
- (3) Hexavalent chromium shall be increased to quarterly sampling following any result  $>$  0.010 mg/L.
- (4) Perchlorate: This frequency applies if there were no detections in the initial monitoring.
- (5) Nitrate (as N) replaces Nitrate (as NO<sub>3</sub>). Nitrate (as N) sampling shall increase to quarterly following any result  $\geq$  5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring. Beginning with Jan. 1, 2016, water systems shall comply with the Nitrate (as N) requirement.
- (6) Nitrite sampling shall be increased to quarterly following any result  $\geq$  0.5 mg/L. Upon request, this may be reduced to an annual frequency after 4 quarters of monitoring.

**WATER QUALITY MONITORING SCHEDULE**  
Nontransient Noncommunity System, groundwater/agricultural (PTGA)  
**UPDATED - September 2015**

<b>Chemical - Title 22</b>	<b>MCL (mg/L)</b>	<b>EPA Method</b>	<b>Frequency (1)</b>
<b>VOCs - Table 64444-A (a)</b>			
Benzene	0.001	502.2, 524.2	Every 6 years
Carbon Tetrachloride	0.0005	502.2, 524.2	Every 6 years
1,2-Dichlorobenzene	0.6	502.2, 524.2	Every 6 years
1,4-Dichlorobenzene	0.005	502.2, 524.2	Every 6 years
1,1-Dichloroethane	0.005	502.2, 524.2	Every 6 years
1,2-Dichloroethane	0.0005	502.2, 524.2	Every 6 years
1,1-Dichloroethylene	0.006	502.2, 524.2	Every 6 years
cis-1,2-Dichloroethylene	0.006	502.2, 524.2	Every 6 years
trans-1,2-Dichloroethylene	0.01	502.2, 524.2	Every 6 years
Dichloromethane	0.005	502.2, 524.2	Every 6 years
1,2-Dichloropropane	0.005	502.2, 524.2	Every 6 years
1,3-Dichloropropane	0.0005	502.2, 524.2	Every 6 years
Ethylbenzene	0.3	502.2, 524.2	Every 6 years
Methyl- <i>tert</i> -butyl ether (MTBE)	0.013	502.2, 524.2	Every 6 years
Monochlorobenzene	0.07	502.2, 524.2	Every 6 years
Styrene	0.1	502.2, 524.2	Every 6 years
1,1,2,2-Tetrachloroethane	0.001	502.2, 524.2	Every 6 years
Tetrachloroethylene (PCE)	0.005	502.2, 524.2	Every 6 years
Toluene	0.15	502.2, 524.2	Every 6 years
1,2,4-Trichlorobenzene	0.005	502.2, 524.2	Every 6 years
1,1,1-Trichloroethane	0.200	502.2, 524.2	Every 6 years
1,1,2-Trichloroethane	0.005	502.2, 524.2	Every 6 years
Trichloroethylene (TCE)	0.005	502.2, 524.2	Every 6 years
Trichlorofluoromethane	0.15	502.2, 524.2	Every 6 years
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.2	502.2, 524.2	Every 6 years
Vinyl Chloride	0.0005	502.2, 524.2	Every 6 years
Xylenes (total)	1.750	502.2, 524.2	Every 6 years
<b>SOCs - Table 64444-A (b)</b>			
Alachlor	0.002	505, 507, 508.1, 525.2	Every 3 years
Atrazine	0.001	505, 507, 508.1, 525.2	Every 3 years
Bentazon	0.018		Waived
Benzo(a)pyrene	0.0002		Waived
Carbofuran	0.018		Waived
Chlordane	0.0001		Waived
2,4-D	0.07		Waived
Dalapon	0.2		Waived
Dibromochloropropane (DBCP)	0.0002	504.1, 551.1	Every 3 years
Di(2-ethylhexyl)adipate	0.4		Waived
Di(2-ethylhexyl)phthalate	0.004		Waived
Dinoseb	0.007		Waived
Diquat	0.02		Waived
Endothall	0.1		Waived
Endrin	0.002		Waived
Ethylene Dibromide (EDB)	0.00005	504.1, 551.1	Every 3 years
Glyphosate	0.7		Waived
Heptachlor	0.00001		Waived
Heptachlor Epoxide	0.00001		Waived
Hexachlorobenzene	0.001		Waived
Hexachlorocyclopentadiene	0.05		Waived
Lindane	0.0002		Waived
Methoxychlor	0.03		Waived
Molinate	0.02		Waived
Oxamyl	0.05		Waived
Pentachlorophenol	0.001		Waived
Picloram	0.5		Waived
Polychlorinated Biphenyls	0.0005		Waived
Simazine	0.004	505, 507, 508.1, 525.2	Every 3 years
Thiobencarb	0.07		Waived
Toxaphene	0.003		Waived
2,3,7,8-TCDD (Dioxin)	0.00000003		Waived
2,4,5-TP (Silvex)	0.05		Waived

(1) This frequency applies only to chemicals for which previous results have shown no detectable results (ND).

Contact your district office for a special monitoring schedule when detectable results are found.



WATER QUALITY MONITORING SCHEDULE  
Nontransient Noncommunity System, groundwater/agricultural (PTGA)  
UPDATED - September 2015

**Radiological Monitoring**

Radioactivity - Section 64442	MCL	EPA Method	Frequency
Gross Alpha	15 pCi/L		Based on result of last sample (1)
Total Radium	5 pCi/L	903.0	When (GA-Uranium) > 5 pCi/L (2)
Uranium	20 pCi/L		When GA > 5 pCi/L (2)
Man Made Radioactivity - Section 64443			
Tritium	20000 pCi/L		Not Required
Strontium	8 pCi/L		Not Required
Gross Beta	50 pCi/L		Not Required

**1. Routine Monitoring**

- a) Routine monitoring frequency for Gross Alpha is based on last sample collected.

Gross Alpha	Monitoring Frequency
Less than 3 pCi/L	1 sample every 9 years
$\geq 3$ and $\leq 7.5$ pCi/L	1 sample every 6 years
$> 7.5$ and $\leq 15$ pCi/L	1 sample every 3 years

**2. Triggered Monitoring**

A frequency is generally not assigned to total radium or uranium as the monitoring for these constituents is dependent on the gross alpha results.

- a) If the Gross Alpha particle activity is less than or equal to 5 pCi/L, analysis for Uranium is not required.
- b) If the Gross Alpha particle activity for any single sample is greater than 5 pCi/L, analysis for Uranium in that same sample is required. If any single sample for Uranium is greater than 20 pCi/L, monitor at least 4 quarters for Uranium.
- c) If the Gross Alpha particle activity is  $> 5$  pCi/L, analysis for uranium may be used to obtain the total radium activity (GA - Uranium = Total Radium). If GA - Uranium  $> 5$ , contact your district office. If GA - Uranium  $< 0$ , report only the GA and Uranium results.

**Contact your district office if the MCL is exceeded, or for clarification on monitoring frequencies.**

**ATTACHMENT G:**  
**LAST SAMPLE/NEXT DUE WATER QUALITY MONITORING SCHEDULE**

## LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
2400066001	2400066 PLANADA SCHOOL	001	WELL #1-S.E.CORNER OF SCHL GRNDS			
	GP SECONDARY/GP					
	01045 IRON		0	0		2015/11 DUE NOW
	00927 MAGNESIUM		0	0		2015/11 DUE NOW
	01055 MANGANESE		0	0		2015/11 DUE NOW
	00929 SODIUM		0	0		2015/11 DUE NOW
	IO INORGANIC					
	01105 ALUMINUM	2013/05/21	3	36		2016/05
	01097 ANTIMONY	2013/05/21	3	36		2016/05
	01002 ARSENIC	2013/05/21	3	36		2016/05
	01007 BARIUM	2013/05/21	3	36		2016/05
	01012 BERYLLIUM	2013/05/21	3	36		2016/05
	01027 CADMIUM	2013/05/21	3	36		2016/05
	01034 CHROMIUM (TOTAL)	2013/05/21	3	36		2016/05
	00951 FLUORIDE (F) (NATURAL-SOURCE)	2013/05/21	3	36		2016/05
	71900 MERCURY	2013/05/21	3	36		2016/05
	01067 NICKEL	2013/05/21	3	36		2016/05
	A-031 PERCHLORATE	2015/07/16	3	36		2018/07
	01147 SELENIUM	2013/05/21	3	36		2016/05
	01059 THALLIUM	2013/05/21	3	36		2016/05
	NI NITRATE/NITRITE					
	00618 Nitrate (as N)		0	0		2015/11 DUE NOW
	71850 NITRATE (AS NO3)	2015/05/21	13	12		2016/05
	00620 NITRITE (AS N)	2013/05/21	3	36		2016/05
	RA RADIOLOGICAL					
	01501 GROSS ALPHA	2009/01/29	3	108	M	2018/01
	S1 REGULATED VOC					
	34506 1,1,1-TRICHLOROETHANE	2013/05/21	3	72		2019/05
	34516 1,1,2,2-TETRACHLOROETHANE	2013/05/21	3	72		2019/05
	34511 1,1,2-TRICHLOROETHANE	2013/05/21	3	72		2019/05
	34496 1,1-DICHLOROETHANE	2013/05/21	3	72		2019/05
	34501 1,1-DICHLOROETHYLENE	2013/05/21	3	72		2019/05

## LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE		GROUP/CONSTITUENT IDENTIFICATION	LAST SAMPLE	COUNT	FREQ	MODIFIED SCHEDULE	NEXT SAMPLE DUE
2400066001	S1	34551 1,2,4-TRICHLOROBENZENE	2013/05/21	2	72		2019/05
		34536 1,2-DICHLOROBENZENE	2013/05/21	3	72		2019/05
		34531 1,2-DICHLOROETHANE	2013/05/21	3	72		2019/05
		34541 1,2-DICHLOROPROPANE	2013/05/21	3	72		2019/05
		34561 1,3-DICHLOROPROPENE (TOTAL)	2013/05/21	2	72		2019/05
		34571 1,4-DICHLOROBENZENE	2013/05/21	3	72		2019/05
		34030 BENZENE	2013/05/21	3	72		2019/05
		32102 CARBON TETRACHLORIDE	2013/05/21	3	72		2019/05
		77093 CIS-1,2-DICHLOROETHYLENE	2013/05/21	2	72		2019/05
		34423 DICHLOROMETHANE	2013/05/21	3	72		2019/05
		34371 ETHYLBENZENE	2013/05/21	3	72		2019/05
		46491 METHYL-TERT-BUTYL-ETHER (MTBE)	2013/05/21	4	72		2019/05
		34301 MONOCHLOROBENZENE	2013/05/21	3	72		2019/05
		77128 STYRENE	2013/05/21	2	72		2019/05
		34475 TETRACHLOROETHYLENE	2013/05/21	3	72		2019/05
		34010 TOLUENE	2013/05/21	3	72		2019/05
		34546 TRANS-1,2-DICHLOROETHYLENE	2013/05/21	3	72		2019/05
		39180 TRICHLOROETHYLENE	2013/05/21	3	72		2019/05
		34488 TRICHLOROFLUOROMETHANE	2013/05/21	3	72		2019/05
		81611 TRICHLOROTRIFLUOROETHANE (FREON 113)	2013/05/21	2	72		2019/05
		39175 VINYL CHLORIDE	2013/05/21	3	72		2019/05
		81551 XYLENES (TOTAL)	2013/05/21	3	72		2019/05
	S2	REGULATED SOC					
		77825 ALACHLOR	2013/05/21	3	36		2016/05
		39033 ATRAZINE	2013/05/21	4	36		2016/05
		38761 DIBROMOCHLOROPROPANE (DBCP)	2015/01/08	3	36		2018/01
		77651 ETHYLENE DIBROMIDE (EDB)	2015/01/08	3	36		2018/01
		39055 SIMAZINE	2013/05/21	4	36		2016/05

LAST SAMPLE DATE AND MONITORING SCHEDULE

SYSTEM NO:

NAME:

COUNTY:

SOURCE NO:

NAME:

CLASS:

STATUS:

DATE: 12/11/2015

STATE OF CALIFORNIA  
DRINKING WATER ANALYSES RESULTS REPORT  
ALL SAMPLES FOR SELECTED CONSTITUENTS - ALL RESULTS  
FOR SAMPLE DATE RANGE OF 20000101 THRU 20151231  
REPORT OF SYSTEM: 2400066

PAGE 1

SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION		DATE	RESULT *	MCL	DLR	TRIGGER	UNIT
2400066001	2400066	PLANADA SCHOOL	001	WELL #1-S.E.CORNER OF SCHL GRNDS				
	IO	INORGANIC						
	A-031	PERCHLORATE	2009/06/02 <	.0000	6.000	4.000	4.000	UG/L
	A-031	PERCHLORATE	2012/07/31 <	.0000	6.000	4.000	4.000	UG/L
	A-031	PERCHLORATE	2015/07/16 <	.0000	6.000	4.000	4.000	UG/L
	NI	NITRATE/NITRITE						
	71850	NITRATE (AS NO3)	2002/03/26	16.6000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2003/03/24	18.8000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2004/03/29	17.1000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2005/03/29	14.7000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2007/05/01	12.0000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2008/05/27	14.7000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2009/05/19	16.0000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2010/05/18	20.3000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2011/05/31	15.8000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2012/05/08	21.9000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2013/05/21	15.6000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2014/05/13	16.5000	45.000	2.000	23.000	MG/L
	71850	NITRATE (AS NO3)	2015/05/21	19.0000	45.000	2.000	23.000	MG/L
	RA	RADIOLOGICAL						
	01501	GROSS ALPHA	2007/05/01	.5000	15.000	3.000	5.000	PCI/L
	01501	GROSS ALPHA	2008/01/08	1.2000	15.000	3.000	5.000	PCI/L
	01501	GROSS ALPHA	2009/01/29 <	.0000	15.000	3.000	5.000	PCI/L



STATE OF CALIFORNIA  
DRINKING WATER ANALYSES RESULTS REPORT  
LAST SAMPLE FOR ALL CHAPTER 15 CONSTITUENTS - ALL RESULTS  
REPORT OF SYSTEM: 2400066

SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	DATE	RESULT	*	MCL	DLR	TRIGGER	UNIT
2400066001	2400066 PLANADA SCHOOL	001	WELL #1-S.E.CORNER OF SCHL GRNDS					
	GP SECONDARY/GP							
	00440 BICARBONATE ALKALINITY	2015/11/23	207.5	*	-----	-----	-----	MG/L
	00916 CALCIUM	2015/11/23	45.6	*	-----	-----	-----	MG/L
	00445 CARBONATE ALKALINITY	2015/11/23	1.0	*	-----	-----	-----	MG/L
	00900 HARDNESS (TOTAL) AS CaCO3	2015/11/23	262.2	*	-----	-----	-----	MG/L
	71830 HYDROXIDE ALKALINITY	2015/11/23	1.0	*	-----	-----	-----	MG/L
	00403 PH, LABORATORY	2015/11/23	7.3	*	-----	-----	-----	
	01077 SILVER	2013/05/21 <	.0000		100.000	10.000	100.000	UG/L
	00095 SPECIFIC CONDUCTANCE	2015/07/16	360.0000		1600.00 0	-----	1600.000	US
	IO INORGANIC							
	01105 ALUMINUM	2013/05/21 <	.0000		1000.00 0	50.000	200.000	UG/L
	01097 ANTIMONY	2013/05/21 <	.0000		6.000	6.000	6.000	UG/L
	01002 ARSENIC	2013/05/21	2.8000		10.000	2.000	5.000	UG/L
	01007 BARIUM	2013/05/21	220.0000		1000.00 0	100.000	1000.000	UG/L
	01012 BERYLLIUM	2013/05/21 <	.0000		4.000	1.000	4.000	UG/L
	01027 CADMIUM	2013/05/21 <	.0000		5.000	1.000	5.000	UG/L
	01034 CHROMIUM (TOTAL)	2013/05/21 <	.0000		50.000	10.000	50.000	UG/L
	01032 CHROMIUM, HEXAVALENT	2014/10/09	1.2000		10.000	1.000	10.000	UG/L
	00951 FLUORIDE (F) (NATURAL-SOURCE)	2013/05/21	.2000		2.000	0.100	2.000	MG/L
	01051 LEAD	2013/05/21	10.0000		-----	5.000	15.000	UG/L
	71900 MERCURY	2013/05/21 <	.0000		2.000	1.000	2.000	UG/L
	01067 NICKEL	2013/05/21 <	.0000		100.000	10.000	100.000	UG/L
	A-031 PERCHLORATE	2015/07/16 <	.0000		6.000	4.000	4.000	UG/L
	01147 SELENIUM	2013/05/21 <	.0000		50.000	5.000	50.000	UG/L
	01059 THALLIUM	2013/05/21 <	.0000		2.000	1.000	2.000	UG/L
	NI NITRATE/NITRITE							
	71850 NITRATE (AS NO3)	2015/05/21	19.0000		45.000	2.000	23.000	MG/L
	A-029 NITRATE + NITRITE (AS N)	2013/05/21	3526.000 0		10000.0 00	400.000	5000.000	UG/L
	00620 NITRITE (AS N)	2013/05/21 <	400.0000		1000.00 0	400.000	500.000	UG/L

STATE OF CALIFORNIA  
DRINKING WATER ANALYSES RESULTS REPORT  
LAST SAMPLE FOR ALL CHAPTER 15 CONSTITUENTS - ALL RESULTS  
REPORT OF SYSTEM: 2400066

SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	DATE	RESULT	*	MCL	DLR	TRIGGER	UNIT
2400066001	RA RADIOLOGICAL							
	01501 GROSS ALPHA	2009/01/29 <	.0000		15.000	3.000	5.000	PCI/L
	01502 GROSS ALPHA COUNTING ERROR	2009/01/29	.1300	*	-----	-----	-----	PCI/L
	S1 REGULATED VOC							
	34506 1,1,1-TRICHLOROETHANE	2013/05/21 <	.0000		200.000	0.500	0.500	UG/L
	34516 1,1,2,2-TETRACHLOROETHANE	2013/05/21 <	.0000		1.000	0.500	0.500	UG/L
	34511 1,1,2-TRICHLOROETHANE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34496 1,1-DICHLOROETHANE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34501 1,1-DICHLOROETHYLENE	2013/05/21 <	.0000		6.000	0.500	0.500	UG/L
	34551 1,2,4-TRICHLOROBENZENE	2013/05/21 <	.0000		5.000	0.500	5.000	UG/L
	34536 1,2-DICHLOROBENZENE	2013/05/21 <	.0000		600.000	0.500	0.500	UG/L
	34531 1,2-DICHLOROETHANE	2013/05/21 <	.0000		0.500	0.500	0.500	UG/L
	34541 1,2-DICHLOROPROPANE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34561 1,3-DICHLOROPROPENE (TOTAL)	2013/05/21 <	.0000		0.500	0.500	0.500	UG/L
	34571 1,4-DICHLOROBENZENE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34030 BENZENE	2013/05/21 <	.0000		1.000	0.500	0.500	UG/L
	32102 CARBON TETRACHLORIDE	2013/05/21 <	.0000		0.500	0.500	0.500	UG/L
	77093 CIS-1,2-DICHLOROETHYLENE	2013/05/21 <	.0000		6.000	0.500	0.500	UG/L
	34423 DICHLOROMETHANE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34371 ETHYLBENZENE	2013/05/21 <	.0000		300.000	0.500	0.500	UG/L
	46491 METHYL-TERT-BUTYL-ETHER (MTBE)	2013/05/21 <	.0000		13.000	3.000	3.000	UG/L
	34301 MONOCHLOROBENZENE	2013/05/21 <	.0000		70.000	0.500	0.500	UG/L
	77128 STYRENE	2013/05/21 <	.0000		100.000	0.500	0.500	UG/L
	34475 TETRACHLOROETHYLENE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34010 TOLUENE	2013/05/21 <	.0000		150.000	0.500	0.500	UG/L
	34546 TRANS-1,2-DICHLOROETHYLENE	2013/05/21 <	.0000		10.000	0.500	0.500	UG/L
	39180 TRICHLOROETHYLENE	2013/05/21 <	.0000		5.000	0.500	0.500	UG/L
	34488 TRICHLOROFLUOROMETHANE	2013/05/21 <	.0000		150.000	5.000	5.000	UG/L
	81611 TRICHLOROTRIFLUOROETHANE (FREON 113)	2013/05/21 <	.0000		1200.00 0	10.000	10.000	UG/L
	39175 VINYL CHLORIDE	2013/05/21 <	.0000		0.500	0.500	0.500	UG/L
	81551 XYLENES (TOTAL)	2013/05/21 <	.0000		1750.00 0	-----	1750.000	UG/L

STATE OF CALIFORNIA  
DRINKING WATER ANALYSES RESULTS REPORT  
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SYSTEM NO: 2400066

NAME: PLANADA SCHOOL

COUNTY: MERCED

SOURCE NO: 001

NAME: WELL #1-S.E.CORNER OF SCHL GRNDS

CLASS: PTGA

STATUS: Active

PSCODE	GROUP/CONSTITUENT IDENTIFICATION	DATE	RESULT	*	MCL	DLR	TRIGGER	UNIT
2400066001	S2 REGULATED SOC							
	77825 ALACHLOR	2013/05/21	<	.0000	2.000	1.000	1.000	UG/L
	39033 ATRAZINE	2013/05/21	<	.0000	1.000	0.500	1.000	UG/L
	34247 BENZO (A) PYRENE	2010/05/18	<	.0000	0.200	0.100	0.100	UG/L
	A-026 DI(2-ETHYLHEXYL)ADIPATE	2010/05/18	<	.0000	400.000	5.000	5.000	UG/L
	39100 DI(2-ETHYLHEXYL)PHTHALATE	2010/05/18	<	.0000	4.000	3.000	3.000	UG/L
	38761 DIBROMOCHLOROPROPANE (DBCP)	2015/01/08	<	.0000	0.200	0.010	0.010	UG/L
	77651 ETHYLENE DIBROMIDE (EDB)	2015/01/08	<	.0000	0.050	0.020	0.020	UG/L
	82199 MOLINATE	2010/05/18	<	.0000	20.000	2.000	2.000	UG/L
	39055 SIMAZINE	2013/05/21	<	.0000	4.000	1.000	1.000	UG/L
	A-001 THIOBENCARB	2010/05/18	<	.0000	70.000	1.000	-----	
	TH TRIHALOMETHANES							
	82080 TOTAL TRIHALOMETHANES	2013/05/21	<	.0000	80.000	-----	80.000	UG/L
	UA STATE UCMR							
	77562 1,1,1,2-TETRACHLOROETHANE	2013/05/21	<	.0000	-----	0.500	0.500	UG/L
	77443 1,2,3-TRICHLOROPROPANE (1,2,3,-TCP)	2007/05/01	<	.5000 *	0.005	0.005	0.005	UG/L
	32101 BROMODICHLOROMETHANE (THM)	2013/05/21	<	.0000	-----	1.000	-----	UG/L
	32104 BROMOFORM (THM)	2013/05/21	<	.0000	-----	1.000	-----	UG/L
	32106 CHLOROFORM (THM)	2013/05/21	<	.0000	-----	1.000	-----	UG/L
	32105 DIBROMOCHLOROMETHANE (THM)	2013/05/21	<	.0000	-----	1.000	-----	UG/L
	34668 DICHLORODIFLUOROMETHANE (FREON 12)	2013/05/21	<	.0000	1000.000	0.500	1000.000	UG/L
	A-033 ETHYL-TERT-BUTYL ETHER	2013/05/21	<	.0000	-----	3.000	-----	UG/L
	A-034 TERT-AMYL-METHYL ETHER	2013/05/21	<	.0000	-----	3.000	-----	UG/L
	UB UNREG. TABLE B							
	77222 1,2,4-TRIMETHYLBENZENE	2013/05/21	<	.0000	330.000	0.500	330.000	UG/L
	38458 DIMETHOATE	2010/05/18	<	.0000	-----	-----	-----	UG/L
	A-011 P-ISOPROPYLTOLUENE	2013/05/21	<	.0000	-----	-----	-----	UG/L
	UC UNREG. TABLE C							
	38533 PROPACHLOR	2010/05/18	<	.0000	0.500	0.500	0.500	UG/L

DATE: 12/11/2015

STATE OF CALIFORNIA  
DRINKING WATER ANALYSES RESULTS REPORT  
LAST SAMPLE FOR ALL CHAPTER 15 CONSTITUENTS - ALL RESULTS  
REPORT OF SYSTEM: 2400066

PAGE 4

SYSTEM NO:

NAME:

COUNTY:

SOURCE NO:

NAME:

CLASS:

STATUS:

**ATTACHMENT H:**  
**BACTERIOLOGICAL SAMPLE SITING PLAN**

**ATTACHMENT B (see p. 6 of instructions)**  
**BACTERIOLOGICAL SAMPLE SITING PLAN**

<b>System No.:</b> 2400066		<b>System Name:</b> Planada Elementary School	
<b>PWS Classification:</b> NTNC		<b>No. Monthly Users:</b>	<b>Daily Users:</b> 605
<b>No. Active Service Connections:</b> 1		<b>Sampling Frequency:</b> 1/month	
<b>Source Sampling Frequency:</b> not Required		<b>Continuous Water Treatment:</b> none	
<b>Name of Trained Sampler:</b>		<b>Analyzing Lab:</b>	
<b>Person responsible to report coliform-positive samples to DHS:</b>		<b>Day/Evening Phone No.:</b>	
<b>Signature of Water System Representative:</b> _____ <b>Date:</b> _____			

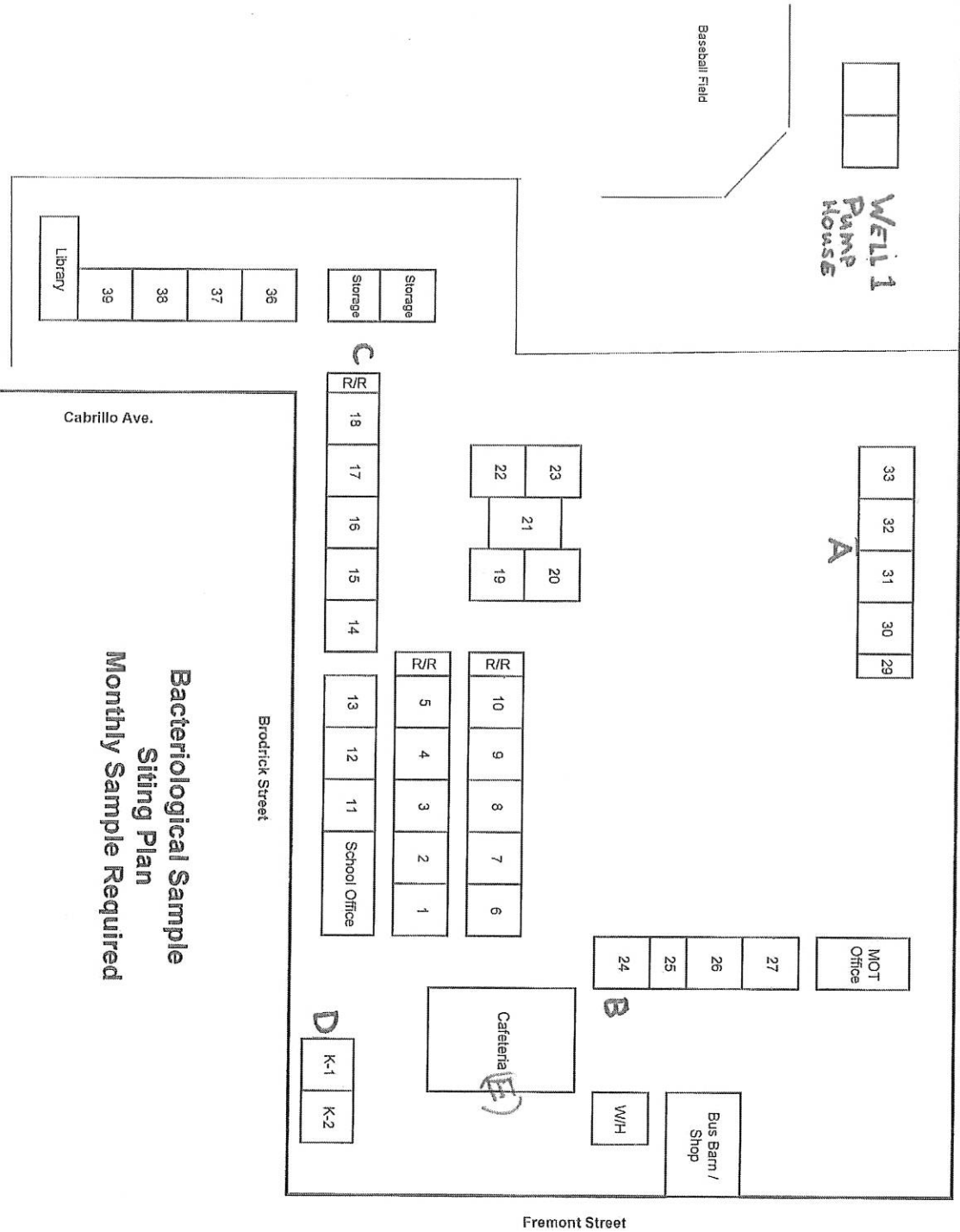
Sample ID	Sample Type	Sample Point	Location of Sample Point	Address of Sample Point	Months Sample Collection at this Location
1-ROU	Routine	HB	HB	KI Bldg (D)	Jan, Mar, May, July, Sept, Nov
1-REP1	Repeat	HB	HB	Restroom by Room 18 (C)	Repeat Sample Only
1-REP2	Repeat	HB	HB	Room 24 (B)	Repeat Sample Only
1-REP3	Repeat	HB	wellhead	well No. 1	Repeat Sample Only
2-ROU	Routine	HB	HB	Room 24 (B)	Feb, Apr, June, Aug, Oct, Dec
2-REP1	Repeat	HB	HB	By Room 32 (A)	Repeat Sample Only
2-REP2	Repeat	HB	HB	By Restroom by Rm 18 (C)	Repeat Sample Only
2-REP3	Repeat	HB	wellhead	well No. 1	Repeat Sample Only
3-ROU	Routine	HB	HB	Restroom at end of Rm 18 (C)	Following TC only
3-REP1	Repeat	HB	HB	KI Bldg (D)	Repeat Sample Only
3-REP2	Repeat	HB	HB	Room 24 (B)	Repeat Sample Only
3-REP3	Repeat	HB	wellhead	well No. 1	Repeat Sample Only
4-ROU	Routine	HB	HB	By Classroom 32 (A)	Following TC only
4-REP1	Repeat	HB	HB	Room 24 (B)	Repeat Sample Only
4-REP2	Repeat	HB	HB	By Restroom by Room 18 (C)	Repeat Sample Only
4-REP3	Repeat	HB	wellhead	well No. 1	Repeat Sample Only
5-ROU	Routine	Sink	Sink	caterina sink (E)	Following TC only
5-REP1	Repeat	HB	HB	Room 24 - (B)	Repeat Sample Only
5-REP2	Repeat	HB	HB	KI Bldg - (D)	Repeat Sample Only
5-REP3	Repeat	HB	wellhead	well No. 1	Repeat Sample Only

If the water system has one or more total coliform-positive samples, at least five routine samples will be collected the following month.

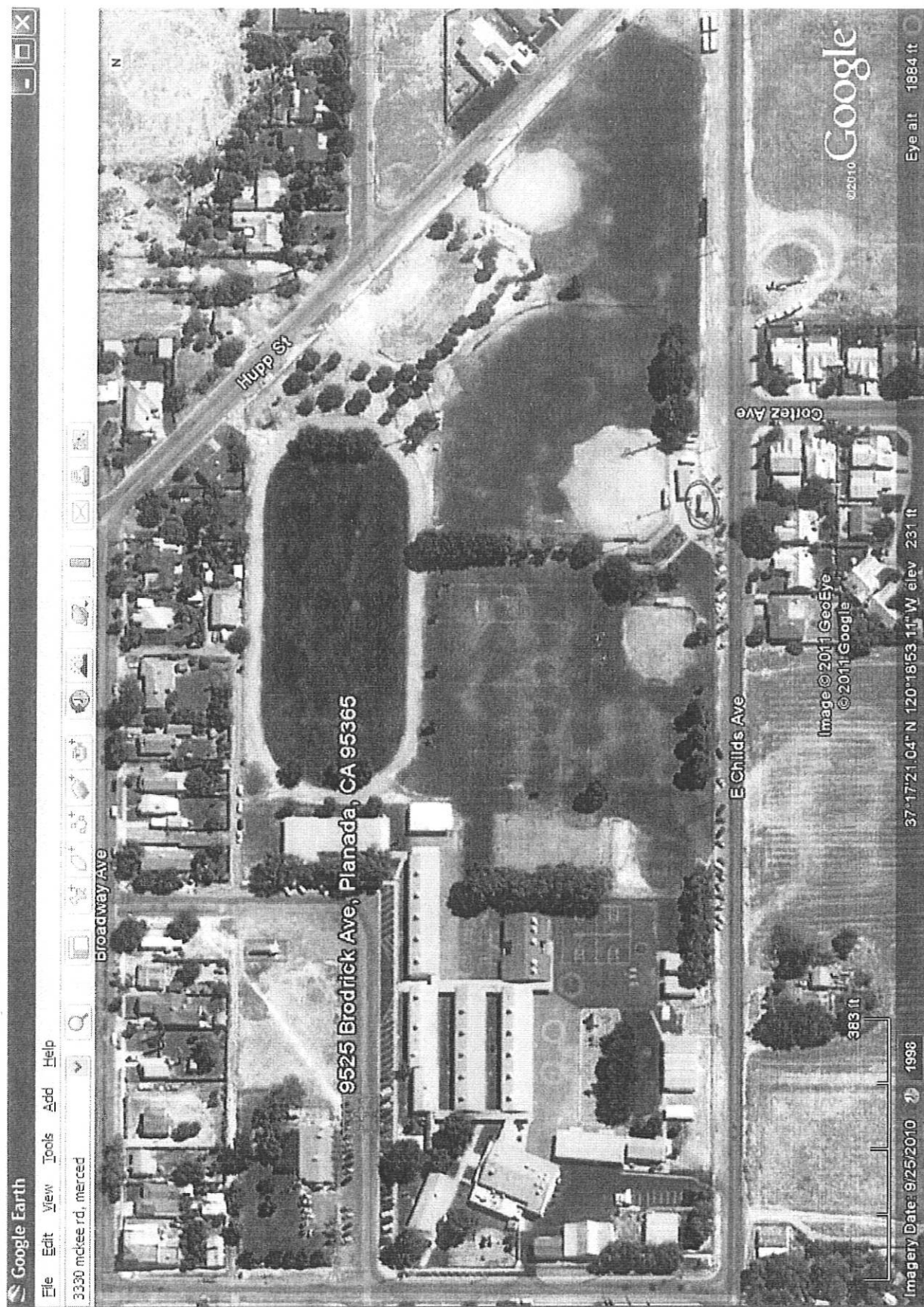


**Planada Elementary School**  
**9525 Brodrick Street, Planada, CA 95365**

*Childs Ave.*



**Bacteriological Sample**  
**Siting Plan**  
**Monthly Sample Required**



Google Earth

File Edit View Tools Add Help

3330 mckee rd, merced



N

Broadway Ave

Hupp St

9525 Brodrick Ave, Planada, CA 95365

E Childs Ave

Cortez Ave

Image © 2011 GeoEye  
© 2011 Google

Google

02/20/10

37°17'21.04" N 120°18'53.11" W elev 231 ft

Imagery Date: 9/25/2010 1998

Eye alt 1884 ft

383 ft

## Bacteriological Sample Siting Plan

(1 Routine sample/month; 1 well; no disinfection)

Date Approved by Merced County Environmental Health: April 16, 2008 (Brent Cronk)

System Name & Address

Planada School  
9525 E. Brodrick Ave.  
Planada, CA 95365

scanned 7/19/11 20  
Date 4/16/08

**APPROVED**

Brent Cronk  
**MERCED COUNTY  
HEALTH DEPARTMENT**

System Number: **2400006**

System Classification: **NTNC**

Wellhead Samples Required (if system is chlorinating)?: **NO**

If YES, enter Frequency:

If YES, enter names, station codes, and locations below (chlorine residual field test result must be reported with each distribution and wellhead sample; label regular wellhead sample as Special):

Monthly Routine Distribution Sample Sites (distribution system samples only, no well samples; label all as Routine):

**B by classroom 24**

Repeat Distribution Sample Sites (minimum of 4 taken within 24 hours; label distribution system sites as Repeat; label well as Source Repeat):

**B**

**C by restroom at end of classroom 18**

**D by classroom K-1**

**Well 1 SE corner of school (label as Source Repeat)**

Routine Distribution Sample Sites the Month Following a Positive Routine Sample (minimum of 5; sample in the order indicated; label distribution system sites as Routine; label well as Source Routine):

**A by classroom 32**

**B**

**C**

**Well 1 (label as Source Routine)**

All *additional* distribution system samples should be labeled as Distribution Special and *additional* wellhead samples as Source Special.

***ATTACHMENT I:  
SUMMARY OF LEAD AND COPPER TAP MONITORING***

# Individual System Lead and Copper Rule Tracking Report

2400066	Planada School	Pop: 605	Eng:	Lead Action Level: 0.015 mg/L	Copper Action Level: 1.3 mg/L						
Sample Date Begin/(End)	Monitoring Period	Sample Set ID	Number Required	Number Sampled	Lead 90th % (mg/L)	Copper 90th % (mg/L)	Action Taken	Action Type	Next Due Date	Next Due Freq	Comments
( 9/10/1994 )	6M2ND-1994	1st 6	20	22	0.0111	0.1462			2nd 6		Historic Data From County
( 7/15/1997 )	6M2ND-1997	2nd 6	20	20	0.0390	0.0949			1st 6		Historic Data From County
( 7/1/1998 )	6M2ND-1998	1st 6	20	20	0.033	0.180			1st 6		Historic Data From County
( 7/10/1999 )	6M2ND-1999	1st 6	20	20	0.052	0.150			1st 6		Historic Data From County
( 7/8/2000 )	6M2ND-2000	1st 6	10	10	0.055	0.176			1st 6		Historic Data From County
( 8/12/2000 )	YR2012	1st 6	10	10	0.012	0.076			2nd 6		Historic Data From County
( 7/9/2005 )	6M2ND-2005	2nd 6	10	10	0.031	0.058			1st 6		Historic Data From County
( 6/30/2006 )	6M1ST-2006	1st 6	10	10	0.038	0.085			1st 6		Historic Data From County
( 8/4/2006 )	6M2ND-2006		2	2	0.0245	<0.050			1st 6		Confirmatory Test -- Historic Data
( 5/10/2007 )	6M1ST-2007		2	2	0.0135	0.0655			1st 6		Confirmatory Test -- Historic Data
( 8/24/2009 )	6M2ND-2009	1st 6	10	10	0.006	0.064			2nd 6		Historic Data From County
( 9/21/2012 )	6M2ND-2012	2nd 6	10	10	<0.005	0.062			9/30/2014	A1	DUE NOW -- Pb AL exceedance
9/21/2014 ( 9/21/2014 )	YR2014	A1	10	5	<0.050	<0.005			9/30/2017	A2	System submitted 5/10 sample results

## Legend:

Cit: Citation

EL: Enforcement letter

1st 6: 1st initial 6-mo. round of monitoring  
2nd 6: 2nd initial 6-mo. round of monitoring

A1: 1st Annual monitoring  
A2: 2nd Annual monitoring

T1: 1st Triennial (3 yr) monitoring  
T2: 2nd Triennial (3 yr) monitoring  
T3: 3rd Triennial (3 yr) monitoring

10/20/2015

2400066 Planada School

Pop: 605

Eng:

Lead Action Level: 0.015 mg/L

Copper Action Level: 1.3 mg/L

Sample Date Begin/(End)	Monitoring Period	Sample Set ID	Number Required	Number Sampled	Lead 90th % (mg/L)	Copper 90th % (mg/L)	Action Taken	Action Type	Next Due Date	Next Due Freq	Comments
6/30/2015 ( 7/23/2015 )	YR2015	A2	5	6	0.0065	0.027			9/30/2018	T1	Invalidated 6/30/15 sample at main office & used the confirmation sample on 7/23/15.

**Legend:**

Cit: Citation

EL: Enforcement letter

1st 6: 1st initial 6-mo. round of monitoring  
2nd 6: 2nd initial 6-mo. round of monitoringA1: 1st Annual monitoring  
A2: 2nd Annual monitoringT1: 1st Triennial (3 yr) monitoring  
T2: 2nd Triennial (3 yr) monitoring  
T3: 3rd Triennial (3 yr) monitoring

10/20/2015



**DRINKING WATER FIELD OPERATIONS BRANCH**

**NOTICE OF CITATION ISSUANCE  
PENALTY**

**BACKGROUND STATEMENT**

The State Water Resources Control Board, Division of Drinking Water, issued **Citation No. 03-11-17C-009** for the **Planada Elementary School** (Public Water System No. **2400066**).

This Citation carries a penalty of \$1,500.00 (one thousand and five hundred dollars).

**METHOD OF PAYMENT**

Within 90 days of receipt of this Citation, submit a check in the amount of \$1,500.00 made payable to:

**SWRCB – Division of Drinking Water**

and mail to:

**SWRCB Accounting Office  
ATTN: Drinking Water Program Fees  
P.O. Box 1888  
Sacramento, CA 95812-1888**

(Please indicate the Citation Number on the Check)

(Attach Check Here)